

Aren0054.ST25.txt
SEQUENCE LISTING

<110> Behan, Dominic P.
Lehmann-Bruinsma, Karin
Chalmers, Derek T.
Lowitz, Kevin P.
Lin, I-Lin
Dang, Huong T.
Chen, Ruoping
Liaw, Chen W.

<120> Non-Endogenous Constitutively Activated Human G Protein Coupled Receptors

<130> AREN-0054

<140> 09/416,760
<141> 1999-10-12

<150> 09/170,496
<151> 1998-10-13

<150> 60/110,060
<151> 1998-11-27

<150> 60/120,416
<151> 1999-02-16

<150> 60/121,852
<151> 1999-02-26

<150> 60/109,213
<151> 1998-11-20

<150> 60/123,944
<151> 1999-03-12

<150> 60/123,945
<151> 1999-03-12

<150> 60/123,948
<151> 1999-03-12

<150> 60/123,951
<151> 1999-03-12

<150> 60/123,946
<151> 1999-03-12

<150> 60/123,949
<151> 1999-03-12

<150> 60/152,524
<151> 1999-09-03

<150> 60/151,114
<151> 1999-08-27

<150> 60/108,029
<151> 1998-11-12

<150> 60/136,436
<151> 1999-05-28

<150> 60/136,439
<151> 1999-05-28

Aren0054.ST25.txt

<150> 60/136,567
<151> 1999-05-28

<150> 60/137,127
<151> 1999-05-28

<150> 60/137,131
<151> 1999-05-28

<150> 60/141,448
<151> 1999-06-29

<150> 60/136,437
<151> 1999-05-28

<150> 60/156,555
<151> 1999-09-29

<150> 60/156,634
<151> 1999-09-29

<150> 60/156,653
<151> 1999-09-29

<150> 60/157,280
<151> 1999-10-01

<150> 60/157,294
<151> 1999-10-01

<150> 60/157,281
<151> 1999-10-01

<150> 60/157,282
<151> 1999-10-01

<150> 60/156,633
<151> 1999-09-29

<160> 146

<170> PatentIn version 3.0

<210> 1
<211> 1260
<212> DNA
<213> Homo sapiens

<400> 1
atggctttct cggcagtgtt gactgcgttc cataccggga catccaacac aacatttgc 60
gtgtatgaaa acacctacat gaatattaca ctccctccac cattccagca tcctgacctc 120
agtccattgc ttagatatacg ttttgaacc atggctccc ctggtttgag ttcccttgacc 180
gtgaatagta cagctgtgcc cacaacacca gcagcattt aagaccta 240
cagatcaccc ttctgttat aatgatattc attctgttt tgcttttct tggaaacttg 300
gttggggcc tcatggttt ccaaaaagct gccatgaggt ctgcaattaa catccctt 360
gccagcctag ctttgcaga catgttgctt gcagtgctga acatgccctt tgccctggta 420
actattctt aatcccgatg gatTTTggg aaattcttct gtagggatc tgctatgttt 480

Aren0054.ST25.txt

ttctggttat ttgtgataga aggagtagcc atcctgctca tcattagcat agataggtc 540
cttattatag tccagaggca ggataagcta aacccatata gagctaaggt tctgattgca 600
gtttcttggg caacttcctt ttgtgtagct tttcctttag ccgttagaaa ccccgacctg 660
cagataacctt cccgagctcc ccagtgtgt tttgggtaca caaccaatcc aggctaccag 720
gcttatgtga ttttgatttc tctcatttct ttcttcatac ctttccttgtt aatactgtac 780
tcatttatgg gcatactcaa cacccttcgg cacaatgcct tgaggatcca tagtaccct 840
gaaggatat gcctcagcca ggccagcaaa ctgggtctca tgagtctgca gagaccttc 900
cagatgagca ttgacatggg cttaaaaca cgtgccttca ccactattt gattctttt 960
gctgtcttca ttgtctgctg ggccccattc accacttaca gccttggtgc aacattcagt 1020
aagcactttt actatcagca caacttttt gagattagca cctggctact gtggctctgc 1080
tacctcaagt ctgcattgaa tccgctgatc tactactgga ggattaagaa attccatgat 1140
gcttgccctgg acatgatgcc taagtcccttc aagttttgc cgccagctccc tggcacaca 1200
aagcgcacgga tacgtcctag tgctgtctat gtgtgtgggg aacatcgac ggtgggtgta 1260

<210> 2
<211> 419
<212> PRT
<213> Homo sapiens

<400> 2

Met Val Phe Ser Ala Val Leu Thr Ala Phe His Thr Gly Thr Ser Asn
1 5 10 15

Thr Thr Phe Val Val Tyr Glu Asn Thr Tyr Met Asn Ile Thr Leu Pro
20 25 30

Pro Pro Phe Gln His Pro Asp Leu Ser Pro Leu Leu Arg Tyr Ser Phe
35 40 45

Glu Thr Met Ala Pro Thr Gly Leu Ser Ser Leu Thr Val Asn Ser Thr
50 55 60

Ala Val Pro Thr Thr Pro Ala Ala Phe Lys Ser Leu Asn Leu Pro Leu
65 70 75 80

Gln Ile Thr Leu Ser Ala Ile Met Ile Phe Ile Leu Phe Val Ser Phe
85 90 95

Leu Gly Asn Leu Val Val Cys Leu Met Val Tyr Gln Lys Ala Ala Met
100 105 110

Arg Ser Ala Ile Asn Ile Leu Leu Ala Ser Leu Ala Phe Ala Asp Met
115 120 125

Leu Leu Ala Val Leu Asn Met Pro Phe Ala Leu Val Thr Ile Leu Thr
130 135 140

Thr Arg Trp Ile Phe Gly Lys Phe Phe Cys Arg Val Ser Ala Met Phe
145 150 155 160

Aren0054.ST25.txt

Phe Trp Leu Phe Val Ile Glu Gly Val Ala Ile Leu Leu Ile Ile Ser
165 170 175

Ile Asp Arg Phe Leu Ile Ile Val Gln Arg Gln Asp Lys Leu Asn Pro
180 185 190

Tyr Arg Ala Lys Val Leu Ile Ala Val Ser Trp Ala Thr Ser Phe Cys
195 200 205

Val Ala Phe Pro Leu Ala Val Gly Asn Pro Asp Leu Gln Ile Pro Ser
210 215 220

Arg Ala Pro Gln Cys Val Phe Gly Tyr Thr Thr Asn Pro Gly Tyr Gln
225 230 235 240

Ala Tyr Val Ile Leu Ile Ser Leu Ile Ser Phe Phe Ile Pro Phe Leu
245 250 255

Val Ile Leu Tyr Ser Phe Met Gly Ile Leu Asn Thr Leu Arg His Asn
260 265 270

Ala Leu Arg Ile His Ser Tyr Pro Glu Gly Ile Cys Leu Ser Gln Ala
275 280 285

Ser Lys Leu Gly Leu Met Ser Leu Gln Arg Pro Phe Gln Met Ser Ile
290 295 300

Asp Met Gly Phe Lys Thr Arg Ala Phe Thr Thr Ile Leu Ile Leu Phe
305 310 315 320

Ala Val Phe Ile Val Cys Trp Ala Pro Phe Thr Thr Tyr Ser Leu Val
325 330 335

Ala Thr Phe Ser Lys His Phe Tyr Tyr Gln His Asn Phe Phe Glu Ile
340 345 350

Ser Thr Trp Leu Leu Trp Leu Cys Tyr Leu Lys Ser Ala Leu Asn Pro
355 360 365

Leu Ile Tyr Tyr Trp Arg Ile Lys Lys Phe His Asp Ala Cys Leu Asp
370 375 380

Met Met Pro Lys Ser Phe Lys Phe Leu Pro Gln Leu Pro Gly His Thr
385 390 395 400

Lys Arg Arg Ile Arg Pro Ser Ala Val Tyr Val Cys Gly Glu His Arg
405 410 415

Thr Val Val

<210> 3
<211> 1119
<212> DNA
<213> Homo sapiens

<400> 3
atgttagcca acagctcctc aaccaacagt tctgttctcc cgtgtcctga ctaccgacct 60
acccaccggcc tgcacttggt ggtctacagc ttgggtgctgg ctgccgggct cccccctcaac 120
gcgctagccc tctgggtctt cctgcgcgcg ctgcgcgtgc actcgggttgt gagcgtgtac 180
atgtgtaacc tggcgcccaag cgacctgctc ttccaccctct cgctgcccgt tcgtctctcc 240

Aren0054.ST25.txt

tactacgcac	tgccaccactg	gcccttcccc	gacctcctgt	gccagacgac	gggcgcac	300	
ttccagatga	acatgtacgg	cagctgcata	ttcctgatgc	tcatcaacgt	ggaccgctac	360	
gcccccattcg	tgcacccgct	gcgactgcgc	cacctgcggc	ggcccccgcgt	ggcgccgctg	420	
ctctgcctgg	gcgtgtggc	gctcatcctg	gtgtttgccg	tgcccgccgc	cccgctgcac	480	
aggccctcgc	gttgcgccta	ccgggacctc	gaggtgcgc	tatgtttcga	gagcttcage	540	
gacgagctgt	ggaaaggcag	gctgctgccc	ctcgtgctgc	tggccgaggc	gctgggcttc	600	
ctgctgcccc	tggccggcgt	ggtctactcg	tcgggcccag	tcttctggac	gctggcgcgc	660	
cccgacgcca	cgcagagcca	gcggccggcgg	aagaccgtgc	gcctcctgct	ggctaacc	720	
gtcatcttcc	tgctgtgc	cgtccctac	aacagcacgc	tggccgtcta	cgggctgctg	780	
cgagcaagc	tggtggcggc	cagcgtgcct	gcccgcgatc	gcgtgcgcgg	ggtgtgtatg	840	
gtgatggtgc	tgctggccgg	cgcctactgc	gtgctggacc	cgctggtgta	ctacttttagc	900	
gccgagggt	tccgcaacac	cctgcgcggc	ctgggcactc	cgcacccggc	caggacactcg	960	
5	gccaccaacg	ggacgcgggc	ggcgctcgcg	caatccaaaa	ggtccggcgt	caccaccgac	1020
6	gccaccaggc	cggatgccgc	cagtcaaaaa	ctgctccgac	cctccgactc	ccactctctg	1080
7	tcttccttca	cacagtgtcc	ccaggattcc	gccctctga			1119

<210> 4
<211> 372
<212> PRT
<213> Homo sapiens

mm. **<400>** 4

Met	Leu	Ala	Asn	Ser	Ser	Ser	Thr	Asn	Ser	Ser	Val	Leu	Pro	Cys	Pro
1				5					10				15		
Asp	Tyr	Arg	Pro	Thr	His	Arg	Leu	His	Leu	Val	Val	Tyr	Ser	Leu	Val
			20						25				30		
Leu	Ala	Ala	Gly	Leu	Pro	Leu	Asn	Ala	Leu	Ala	Leu	Trp	Val	Phe	Leu
		35					40					45			
Arg	Ala	Leu	Arg	Val	His	Ser	Val	Val	Ser	Val	Tyr	Met	Cys	Asn	Leu
		50				55					60				
Ala	Ala	Ser	Asp	Leu	Leu	Phe	Thr	Leu	Ser	Leu	Pro	Val	Arg	Leu	Ser
		65				70				75			80		
Tyr	Tyr	Ala	Leu	His	His	Trp	Pro	Phe	Pro	Asp	Leu	Leu	Cys	Gln	Thr
				85				90					95		
Thr	Gly	Ala	Ile	Phe	Gln	Met	Asn	Met	Tyr	Gly	Ser	Cys	Ile	Phe	Leu
				100				105					110		
Met	Leu	Ile	Asn	Val	Asp	Arg	Tyr	Ala	Ala	Ile	Val	His	Pro	Leu	Arg
			115				120					125			
Leu	Arg	His	Leu	Arg	Arg	Pro	Arg	Val	Ala	Arg	Leu	Leu	Cys	Leu	Gly
			130			135					140				

Aren0054.ST25.txt

Val Trp Ala Leu Ile Leu Val Phe Ala Val Pro Ala Ala Arg Val His
145 150 155 160

Arg Pro Ser Arg Cys Arg Tyr Arg Asp Leu Glu Val Arg Leu Cys Phe
165 170 175

Glu Ser Phe Ser Asp Glu Leu Trp Lys Gly Arg Leu Leu Pro Leu Val
180 185 190

Leu Leu Ala Glu Ala Leu Gly Phe Leu Leu Pro Leu Ala Ala Val Val
195 200 205

Tyr Ser Ser Gly Arg Val Phe Trp Thr Leu Ala Arg Pro Asp Ala Thr
210 215 220

Gln Ser Gln Arg Arg Arg Lys Thr Val Arg Leu Leu Leu Ala Asn Leu
225 230 235 240

Val Ile Phe Leu Leu Cys Phe Val Pro Tyr Asn Ser Thr Leu Ala Val
245 250 255

Tyr Gly Leu Leu Arg Ser Lys Leu Val Ala Ala Ser Val Pro Ala Arg
260 265 270

Asp Arg Val Arg Gly Val Leu Met Val Met Val Leu Leu Ala Gly Ala
275 280 285

Asn Cys Val Leu Asp Pro Leu Val Tyr Tyr Phe Ser Ala Glu Gly Phe
290 295 300

Arg Asn Thr Leu Arg Gly Leu Gly Thr Pro His Arg Ala Arg Thr Ser
305 310 315 320

Ala Thr Asn Gly Thr Arg Ala Ala Leu Ala Gln Ser Glu Arg Ser Ala
325 330 335

Val Thr Thr Asp Ala Thr Arg Pro Asp Ala Ala Ser Gln Gly Leu Leu
340 345 350

Arg Pro Ser Asp Ser His Ser Leu Ser Ser Phe Thr Gln Cys Pro Gln
355 360 365

Asp Ser Ala Leu
370

<210> 5
<211> 1107
<212> DNA
<213> Homo sapiens

<400> 5
atggccaact ccacagggct gaacgcctca gaagtgcgag gtcgttggg gttgatcctg 60
gcagctgtcg tggaggtggg ggcactgctg ggcaacggcg cgctgcttgt cgtggtgctg 120
cgcacgcccc gactgcgcga cgcgctctac ctggcgcacc tgtgcgtcgt ggacctgctg 180
gcggccgcct ccatcatgcc gctggcctg ctggccgcac cgccgccccg gctggccgc 240
gtgcgcctgg gccccgcgcc atgccgcgcc gctcgcttcc tctccgcgc tctgctgccg 300
gcctgcacgc tcggggtgcc cgcaacttggc ctggcacgct accgcctcat cgtgcacccg 360
ctgcggccag gctcgcggcc gcccgcgttg ctcgtgctca cccgcgtgtg ggccgcggcg 420

Aren0054.ST25.txt

ggactgctgg	gcfgcgtctc	cctgctcgcc	ccgcgcggcc	caccgcggcc	tgctccgtct	480
cgctgctcg	tcctggctgg	gggcctcg	cccttccggc	cgctctggc	cctgctggcc	540
ttcgcgtgc	ccgcccctct	gctgctcgcc	gcctacggcg	gcatcttcgt	ggtggcgcgt	600
cgcgtgccc	tgaggcccc	acggccggcg	cgcgggtccc	gactccgctc	ggactctctg	660
gatagccgc	tttccatctt	gccgcccgtc	cgccctcgcc	tgcccgggg	caaggcggcc	720
ctggcccaag	cgctggccgt	ggccaattt	gcagcctgct	ggctgcctta	tggctgcgcg	780
tgcctggcgc	ccgcagcgcg	ggccgcggaa	gccgaagcgg	ctgtcacctg	ggtcgcctac	840
tcggccttcg	cggctcaccc	cttcctgtac	gggctgctgc	agcgccccgt	gchgcttggca	900
ctggccgc	tctctcgcc	tgcactgcct	ggacctgtgc	ggcctgcac	tccgcaagcc	960
tggcacccgc	gggcactctt	gcaatgcctc	cagagacccc	cagagggccc	tgccgttaggc	1020
ccttctgagg	ctccagaaca	gaccccccag	ttggcaggag	ggcggagccc	cgcataccag	1080
ggccacactg	agagttctct	ctcctga				1107

<210>	6		
<211>	368		
<212>	PRT		
<213>	Homo sapiens		
<400>	6		
Met Ala Asn Ser Thr Gly Leu Asn Ala Ser Glu Val Ala Gly Ser Leu			
1	5	10	15
Gly Leu Ile Leu Ala Ala Val Val Glu Val Gly Ala Leu Leu Gly Asn			
20	25	30	
Gly Ala Leu Leu Val Val Val Leu Arg Thr Pro Gly Leu Arg Asp Ala			
35	40	45	
Leu Tyr Leu Ala His Leu Cys Val Val Asp Leu Leu Ala Ala Ala Ser			
50	55	60	
Ile Met Pro Leu Gly Leu Leu Ala Ala Pro Pro Pro Gly Leu Gly Arg			
65	70	75	80
Val Arg Leu Gly Pro Ala Pro Cys Arg Ala Ala Arg Phe Leu Ser Ala			
85	90	95	
Ala Leu Leu Pro Ala Cys Thr Leu Gly Val Ala Ala Leu Gly Leu Ala			
100	105	110	
Arg Tyr Arg Leu Ile Val His Pro Leu Arg Pro Gly Ser Arg Pro Pro			
115	120	125	
Pro Val Leu Val Leu Thr Ala Val Trp Ala Ala Gly Leu Leu Gly			
130	135	140	
Ala Leu Ser Leu Leu Gly Pro Pro Pro Ala Pro Pro Pro Ala Pro Ala			
145	150	155	160
Arg Cys Ser Val Leu Ala Gly Gly Leu Gly Pro Phe Arg Pro Leu Trp			
165	170	175	

Aren0054.ST25.txt

Ala Leu Leu Ala Phe Ala Leu Pro Ala Leu Leu Leu Gly Ala Tyr
 180 185 190

Gly Gly Ile Phe Val Val Ala Arg Arg Ala Ala Leu Arg Pro Pro Arg
 195 200 205

Pro Ala Arg Gly Ser Arg Leu Arg Ser Asp Ser Leu Asp Ser Arg Leu
 210 215 220

Ser Ile Leu Pro Pro Leu Arg Pro Arg Leu Pro Gly Gly Lys Ala Ala
 225 230 235 240

Leu Ala Pro Ala Leu Ala Val Gly Gln Phe Ala Ala Cys Trp Leu Pro
 245 250 255

Tyr Gly Cys Ala Cys Leu Ala Pro Ala Ala Arg Ala Ala Glu Ala Glu
 260 265 270

Ala Ala Val Thr Trp Val Ala Tyr Ser Ala Phe Ala Ala His Pro Phe
 275 280 285

Leu Tyr Gly Leu Leu Gln Arg Pro Val Arg Leu Ala Leu Gly Arg Leu
 290 295 300

Ser Arg Arg Ala Leu Pro Gly Pro Val Arg Ala Cys Thr Pro Gln Ala
 305 310 315 320

Trp His Pro Arg Ala Leu Leu Gln Cys Leu Gln Arg Pro Pro Glu Gly
 325 330 335

Pro Ala Val Gly Pro Ser Glu Ala Pro Glu Gln Thr Pro Glu Leu Ala
 340 345 350

Gly Gly Arg Ser Pro Ala Tyr Gln Gly Pro Pro Glu Ser Ser Leu Ser
 355 360 365

<210> 7

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 7

atggaatcat ctttctcatt tggagtgtac ctgtgtgtcc tggcctccct catcattgt 60

actaacacac tagtggctgt ggctgtgctg ctgttgatcc acaagaatga tggtgtcagt 120

ctctgcttca ctttgaatct ggctgtggct gacaccttga ttggtgtggc catctctggc 180

ctactcacag accagctctc cagcccttct cgccccacac agaagaccct gtgcagcctg 240

cggatggcat ttgtcacttc ctcccgagct gcctctgtcc tcacggtcat gctgatcacc 300

tttgacaggt accttgccat caagcagccc ttccgctact tgaagatcat gagtgggttc 360

gtggccgggg cctgcattgc cgggctgtgg ttagtgtctt acctcattgg cttcctccca 420

ctcggaatcc ccatgttcca gcagactgcc tacaaagggc agtgcagctt ctttgcgtta 480

tttcaccctc acttcgtgct gaccctctcc tgcgttggtc tcttcccagc catgctcctc 540

tttgtcttct tctactgcga catgctcaag attgcctcca tgcacagcca gcagattcga 600

aagatggaac atgcaggagc catggctgga gtttatcgat ccccacggac tcccagcgcac 660

ttcaaagctc tccgtactgt gtctgttctc attgggagct ttgctctatc ctggacccccc 720

Aren0054.ST25.txt

ttccttatca ctggcattgt gcaggtggcc tgccaggagt gtcacctcta cctagtgctg	780
gaacggtacc tgtggctgct cggcggtggc aactccctgc tcaacccact catctatgcc	840
tattggcaga aggaggtgcg actgcagctc taccacatgg cccttaggagt gaagaaggtg	900
ctcacctcat tcctcctctt tctctcgcc aggaattgtg gcccagagag gcccaggaa	960
agttcctgtc acatcgtcac tatctccagc tcagagttt atggctaa	1008

<210> 8
 <211> 335
 <212> PRT
 <213> Homo sapiens
 <400> 8

Met Glu Ser Ser Phe Ser Phe Gly Val Ile Leu Ala Val Leu Ala Ser
 1 5 10 15

Leu Ile Ile Ala Thr Asn Thr Leu Val Ala Val Ala Val Leu Leu Leu
 20 25 30

Ile His Lys Asn Asp Gly Val Ser Leu Cys Phe Thr Leu Asn Leu Ala
 35 40 45

Val Ala Asp Thr Leu Ile Gly Val Ala Ile Ser Gly Leu Leu Thr Asp
 50 55 60

Gln Leu Ser Ser Pro Ser Arg Pro Thr Gln Lys Thr Leu Cys Ser Leu
 65 70 75 80

Arg Met Ala Phe Val Thr Ser Ser Ala Ala Ala Ser Val Leu Thr Val
 85 90 95

Met Leu Ile Thr Phe Asp Arg Tyr Leu Ala Ile Lys Gln Pro Phe Arg
 100 105 110

Tyr Leu Lys Ile Met Ser Gly Phe Val Ala Gly Ala Cys Ile Ala Gly
 115 120 125

Leu Trp Leu Val Ser Tyr Leu Ile Gly Phe Leu Pro Leu Gly Ile Pro
 130 135 140

Met Phe Gln Gln Thr Ala Tyr Lys Gly Gln Cys Ser Phe Phe Ala Val
 145 150 155 160

Phe His Pro His Phe Val Leu Thr Leu Ser Cys Val Gly Phe Phe Pro
 165 170 175

Ala Met Leu Leu Phe Val Phe Phe Tyr Cys Asp Met Leu Lys Ile Ala
 180 185 190

Ser Met His Ser Gln Gln Ile Arg Lys Met Glu His Ala Gly Ala Met
 195 200 205

Ala Gly Gly Tyr Arg Ser Pro Arg Thr Pro Ser Asp Phe Lys Ala Leu
 210 215 220

Arg Thr Val Ser Val Leu Ile Gly Ser Phe Ala Leu Ser Trp Thr Pro
 225 230 235 240

Phe Leu Ile Thr Gly Ile Val Gln Val Ala Cys Gln Glu Cys His Leu

Aren0054.ST25.txt

245

250

255

Tyr Leu Val Leu Glu Arg Tyr Leu Trp Leu Leu Gly Val Gly Asn Ser
 260 265 270

Leu Leu Asn Pro Leu Ile Tyr Ala Tyr Trp Gln Lys Glu Val Arg Leu
 275 280 285

Gln Leu Tyr His Met Ala Leu Gly Val Lys Lys Val Leu Thr Ser Phe
 290 295 300

Leu Leu Phe Leu Ser Ala Arg Asn Cys Gly Pro Glu Arg Pro Arg Glu
 305 310 315 320

Ser Ser Cys His Ile Val Thr Ile Ser Ser Ser Glu Phe Asp Gly
 325 330 335

<210> 9

<211> 1413

<212> DNA

<213> Homo sapiens

<400> 9

atggacacta ccatggaagc tgacctgggt gccactggcc acaggccccg cacagagctt	60
gatgatgagg actcctaccc ccaagggtggc tgggacacgg tcttccttgt ggccctgctg	120
ctccttgggc tgccagccaa tgggttgatg gcgtggctgg ccggctccca ggcccgcat	180
ggagctggca cgcgtctggc gctgctcctg ctcagcctgg ccctctctga cttcttgttc	240
ctggcagcag cggcattcca gatccttagag atccggcatg gggcacactg gccgctgggg	300
acagctgcct gccgcttcta ctacttccta tggggcgtgt cctactcctc cggccttttc	360
ctgctggccg ccctcagcct cgaccgctgc ctgctggcgc tgtgcccaca ctggtaccct	420
gggcaccgcc cagtccgcct gcccctctgg gtctgcgcgc gtgtctgggt gctggccaca	480
ctcttcagcg tgccctggct ggtcttcccc gaggctgccc tctggtgta cgacctggc	540
atctgcctgg acttctggga cagcgaggag ctgtcgctga ggatgctgga gtcctgggg	600
ggcttcctgc ctttcctcct gtcgtcgctc tgccacgtgc tcacccaggc cacagcctgt	660
cgcacactgcc accgccaaca gcagccccca gcctgcccgg gcttcgcccc tgtggccagg	720
accattctgt cagcctatgt ggtcctgagg ctgccttacc agctggccca gtcgtctac	780
ctggccttcc tgtgggacgt ctactctggc tacctgctct gggaggccct ggtctactcc	840
gactacctga tcctactcaa cagctgcctc agcccttcc tctgcctcat ggccagtgcc	900
gacctccgga ccctgctgcg ctccgtgctc tcgtccttcg cggcagctct ctgcgaggag	960
cggccggca gttcacgccc cactgagcca cagacccagc tagattctga ggtccaact	1020
ctgcccagagc cgatggcaga gcccagtc cagatggatc ctgtggccca gcctcaggtg	1080
aaccccacac tccagccacg atcggatccc acagctcagc cacagctgaa ccctacggcc	1140
cagccacagt cggatcccac agcccagcca cagctgaacc tcacggccca gccacagtca	1200
gattctgtgg cccagccaca ggcagacact aacgtccaga cccctgcacc tgctgccagt	1260

Aren0054.ST25.txt

tctgtgccccca gtccctgtga tgaagcttcc ccaaccccat cctcgcatcc taccccaggg 1320
gcccttgagg acccagccac acctcctgcc tctgaaggag aaagccccag cagcaccccg 1380
ccagaggcgg cccccggcgc aggccccacg tga 1413

<210> 10
<211> 468
<212> PRT
<213> Homo sapiens

<400> 10

Met Asp Thr Thr Met Glu Ala Asp Leu Gly Ala Thr Gly His Arg Pro
1 5 10 15

Arg Thr Glu Leu Asp Asp Glu Asp Ser Tyr Pro Gln Gly Gly Trp Asp
20 25 30

Thr Val Phe Leu Val Ala Leu Leu Leu Gly Leu Pro Ala Asn Gly
35 40 45

Leu Met Ala Trp Leu Ala Gly Ser Gln Ala Arg His Gly Ala Gly Thr
50 55 60

Arg Leu Ala Leu Leu Leu Ser Leu Ala Leu Ser Asp Phe Leu Phe
65 70 75 80

Leu Ala Ala Ala Ala Phe Gln Ile Leu Glu Ile Arg His Gly Gly His
85 90 95

Trp Pro Leu Gly Thr Ala Ala Cys Arg Phe Tyr Tyr Phe Leu Trp Gly
100 105 110

Val Ser Tyr Ser Ser Gly Leu Phe Leu Leu Ala Ala Leu Ser Leu Asp
115 120 125

Arg Cys Leu Leu Ala Leu Cys Pro His Trp Tyr Pro Gly His Arg Pro
130 135 140

Val Arg Leu Pro Leu Trp Val Cys Ala Gly Val Trp Val Leu Ala Thr
145 150 155 160

Leu Phe Ser Val Pro Trp Leu Val Phe Pro Glu Ala Ala Val Trp Trp
165 170 175

Tyr Asp Leu Val Ile Cys Leu Asp Phe Trp Asp Ser Glu Glu Leu Ser
180 185 190

Leu Arg Met Leu Glu Val Leu Gly Gly Phe Leu Pro Phe Leu Leu Leu
195 200 205

Leu Val Cys His Val Leu Thr Gln Ala Thr Arg Thr Cys His Arg Gln
210 215 220

Gln Gln Pro Ala Ala Cys Arg Gly Phe Ala Arg Val Ala Arg Thr Ile
225 230 235 240

Leu Ser Ala Tyr Val Val Leu Arg Leu Pro Tyr Gln Leu Ala Gln Leu
245 250 255

Leu Tyr Leu Ala Phe Leu Trp Asp Val Tyr Ser Gly Tyr Leu Leu Trp
260 265 270

Aren0054.ST25.txt

Glu Ala Leu Val Tyr Ser Asp Tyr Leu Ile Leu Leu Asn Ser Cys Leu
 275 280 285

Ser Pro Phe Leu Cys Leu Met Ala Ser Ala Asp Leu Arg Thr Leu Leu
 290 295 300

Arg Ser Val Leu Ser Ser Phe Ala Ala Ala Leu Cys Glu Glu Arg Pro
 305 310 315 320

Gly Ser Phe Thr Pro Thr Glu Pro Gln Thr Gln Leu Asp Ser Glu Gly
 325 330 335

Pro Thr Leu Pro Glu Pro Met Ala Glu Ala Gln Ser Gln Met Asp Pro
 340 345 350

Val Ala Gln Pro Gln Val Asn Pro Thr Leu Gln Pro Arg Ser Asp Pro
 355 360 365

Thr Ala Gln Pro Gln Leu Asn Pro Thr Ala Gln Pro Gln Ser Asp Pro
 370 375 380

Thr Ala Gln Pro Gln Leu Asn Leu Met Ala Gln Pro Gln Ser Asp Ser
 385 390 395 400

Val Ala Gln Pro Gln Ala Asp Thr Asn Val Gln Thr Pro Ala Pro Ala
 405 410 415

Ala Ser Ser Val Pro Ser Pro Cys Asp Glu Ala Ser Pro Thr Pro Ser
 420 425 430

Ser His Pro Thr Pro Gly Ala Leu Glu Asp Pro Ala Thr Pro Pro Ala
 435 440 445

Ser Glu Gly Glu Ser Pro Ser Ser Thr Pro Pro Glu Ala Ala Pro Gly
 450 455 460

Ala Gly Pro Thr
 465

<210> 11
 <211> 1248
 <212> DNA
 <213> Homo sapiens

<400> 11
 atgtcaggga tggaaaaact tcagaatgct tcctggatct accagcgagaa actagaagat 60
 ccattccaga aacacctgaa cagcacccgag gagtatctgg ctttcctctg cgacccctgg 120
 cgcagccact ttttcctccc cgtgtctgtg gtgtatgtgc caattttgtt ggtgggggtc 180
 attggcaatg tcctgggttg cctggtgatt ctgcagcacc aggctatgaa gacgcccacc 240
 aactactacc ttttcagcct ggcggctct gacccctgg tcctgctcct tggaatgccc 300
 ctggaggct atgagatgtg ggcacaactac ctttcttgc tcggggccgt gggctgctac 360
 ttcaagacgg cccttttga gaccgtgtgc ttccctcca tcctcagcat caccaccgtc 420
 agcgtggagc gctacgtggc catcctacac ccgttccgag ccaaactgca gagcaccgg 480
 cggccggccc tcaggatcct cggcatcgat tggtttctt ccgtgcttt ctccctgccc 540
 aacaccagca tccatggcat caagttccac tacttccccca atgggtccct ggtcccaggt 600

Aren0054.ST25.txt

tcggccacct	gtacggtcat	caagccatg	tggatctaca	atttcatcat	ccaggtaacc	660
tccttcstat	tctacctcct	ccccatgact	gtcatcagtg	tcctctacta	cctcatggca	720
ctcagactaa	agaaagacaa	atctcttgag	gcagatgaag	ggaatgcaaa	tattcaaaga	780
ccctgcagaa	aatcagtcaa	caagatgctg	tttgtcttgg	tcttagtgtt	tgctatctgt	840
tgggccccgt	tccacattga	ccgactcttc	ttcagctttg	tggaggagtg	gagtgaatcc	900
ctggctgctg	tgttcaacct	cgtccatgtg	gtgtcaggtg	tcttcttcta	cctgagctca	960
gctgtcaacc	ccattatcta	taacctactg	tctcgccgct	tccaggcagc	attccagaat	1020
gtgatctctt	cttccacaa	acagtggcac	tcccagcatg	acccacagt	gccacctgcc	1080
cagcggaca	tcttcctgac	agaatgccac	tttgtggagc	tgaccgaaga	tataggtccc	1140
caattccat	gtcagtcatc	catgcacaac	tctcacctcc	caacagccct	ctctagtgaa	1200
cagatgtcaa	gaacaaacta	tcaaagcttc	cactttaaca	aaacctga		1248

<210> 12

<211> 415

<212> PRT

<213> Homo sapiens

<400> 12

Met	Ser	Gly	Met	Glu	Lys	Leu	Gln	Asn	Ala	Ser	Trp	Ile	Tyr	Gln	Gln
1					5				10				15		

Lys	Leu	Glu	Asp	Pro	Phe	Gln	Lys	His	Leu	Asn	Ser	Thr	Glu	Glu	Tyr
					20				25				30		

Leu	Ala	Phe	Leu	Cys	Gly	Pro	Arg	Arg	Ser	His	Phe	Phe	Leu	Pro	Val
						35		40			45				

Ser	Val	Val	Tyr	Val	Pro	Ile	Phe	Val	Val	Gly	Val	Ile	Gly	Asn	Val
						50		55		60					

Leu	Val	Cys	Leu	Val	Ile	Leu	Gln	His	Gln	Ala	Met	Lys	Thr	Pro	Thr
					65			70		75			80		

Asn	Tyr	Tyr	Leu	Phe	Ser	Leu	Ala	Val	Ser	Asp	Leu	Leu	Val	Leu	Leu
						85			90		95				

Leu	Gly	Met	Pro	Leu	Glu	Val	Tyr	Glu	Met	Trp	Arg	Asn	Tyr	Pro	Phe
						100		105			110				

Leu	Phe	Gly	Pro	Val	Gly	Cys	Tyr	Phe	Lys	Thr	Ala	Leu	Phe	Glu	Thr
						115		120		125					

Val	Cys	Phe	Ala	Ser	Ile	Leu	Ser	Ile	Thr	Thr	Val	Ser	Val	Glu	Arg
						130		135		140					

Tyr	Val	Ala	Ile	Leu	His	Pro	Phe	Arg	Ala	Lys	Leu	Gln	Ser	Thr	Arg
						145		150		155			160		

Arg	Arg	Ala	Leu	Arg	Ile	Leu	Gly	Ile	Val	Trp	Gly	Phe	Ser	Val	Leu
						165			170		175				

Phe	Ser	Leu	Pro	Asn	Thr	Ser	Ile	His	Gly	Ile	Lys	Phe	His	Tyr	Phe
						180		185			190				

Aren0054.ST25.txt

Pro Asn Gly Ser Leu Val Pro Gly Ser Ala Thr Cys Thr Val Ile Lys
 195 200 205

Pro Met Trp Ile Tyr Asn Phe Ile Ile Gln Val Thr Ser Phe Leu Phe
 210 215 220

Tyr Leu Leu Pro Met Thr Val Ile Ser Val Leu Tyr Tyr Leu Met Ala
 225 230 235 240

Leu Arg Leu Lys Lys Asp Lys Ser Leu Glu Ala Asp Glu Gly Asn Ala
 245 250 255

Asn Ile Gln Arg Pro Cys Arg Lys Ser Val Asn Lys Met Leu Phe Val
 260 265 270

Leu Val Leu Val Phe Ala Ile Cys Trp Ala Pro Phe His Ile Asp Arg
 275 280 285

Leu Phe Phe Ser Phe Val Glu Glu Trp Ser Glu Ser Leu Ala Ala Val
 290 295 300

Phe Asn Leu Val His Val Val Ser Gly Val Phe Phe Tyr Leu Ser Ser
 305 310 315 320

Ala Val Asn Pro Ile Ile Tyr Asn Leu Leu Ser Arg Arg Phe Gln Ala
 325 330 335

Ala Phe Gln Asn Val Ile Ser Ser Phe His Lys Gln Trp His Ser Gln
 340 345 350

His Asp Pro Gln Leu Pro Pro Ala Gln Arg Asn Ile Phe Leu Thr Glu
 355 360 365

Cys His Phe Val Glu Leu Thr Glu Asp Ile Gly Pro Gln Phe Pro Cys
 370 375 380

Gln Ser Ser Met His Asn Ser His Leu Pro Thr Ala Leu Ser Ser Glu
 385 390 395 400

Gln Met Ser Arg Thr Asn Tyr Gln Ser Phe His Phe Asn Lys Thr
 405 410 415

<210> 13
 <211> 1173
 <212> DNA
 <213> Homo sapiens

<400> 13			
atgcaggata ctaatagcac aatcaattta tcactaagca ctcgtgttac ttttagcattt		60	
tttatgtcct tagtagcttt tgctataatg ctagggaaatg cttaggtcat ttttagcttt		120	
gtgggtggaca aaaaccttag acatcgaagt agttatTTTT ttcttaactt ggccatctct		180	
gacttctttg tgggtgtat ctccattcct ttgtacatcc ctcacacgct gttcgaatgg		240	
gatTTTggaa aggaaatctg tgtatTTTgg ctcactactg actatctgtt atgtacagca		300	
tctgtatata acattgtcct catcagctat gatcgatacc tgtcagtctc aaatgctgtg		360	
tcttatagaa ctcaacatac tggggcttgg aagattgtta ctctgatggt ggccgtttgg		420	
gtgctggcct tcttagtgaa tgggccaatg attctagttt cagagtcttgg gaaggatgaa		480	

Aren0054.ST25.txt

ggtagtgaat	gtgaacctgg	attttttcg	aatggtaca	tccttgcac	cacatcattc	540
ttggaattcg	tgatcccagt	catcttagtc	gcttatttca	acatgaatat	ttattggagc	600
ctgttggaa	gcgtgatcatct	cagtaggtgc	caaagccatc	ctggactgac	tgctgtctct	660
tccaaacatct	gtggacactc	attcagaggt	agactatctt	caaggagatc	tctttctgca	720
tcgacagaag	ttcctgcatic	ctttcattca	gagagacaga	ggagaaaagag	tagtctcatg	780
ttttcctcaa	gaaccaagat	gaatagcaat	acaattgctt	ccaaaatggg	ttccttctcc	840
caatcagatt	ctgttagctct	tcaccaaagg	gaacatgttg	aactgcttag	agccaggaga	900
ttagccaagt	cactggccat	tctcttaggg	gttttgctg	tttgctggc	tccatattct	960
ctgttcacaa	ttgtccttcc	attttattcc	tcagcaacag	gtcctaaatc	agtttggtat	1020
agaattgcat	tttggcttca	gtggttcaat	tcctttgtca	atcctctttt	gtatccattg	1080
tgtcacaagc	gctttcaaaa	ggctttcttg	aaaatatttt	gtataaaaaaa	gcaacctcta	1140
ccatcacaac	acagtcggtc	agtatcttct	taa			1173

<210>	14		
<211>	390		
<212>	PRT		
<213>	Homo sapiens		
<400>	14		
Met Pro Asp Thr Asn Ser Thr Ile Asn Leu Ser Leu Ser Thr Arg Val			
1	5	10	15
Thr Leu Ala Phe Phe Met Ser Leu Val Ala Phe Ala Ile Met Leu Gly			
20	25	30	
Asn Ala Leu Val Ile Leu Ala Phe Val Val Asp Lys Asn Leu Arg His			
35	40	45	
Arg Ser Ser Tyr Phe Phe Leu Asn Leu Ala Ile Ser Asp Phe Phe Val			
50	55	60	
Gly Val Ile Ser Ile Pro Leu Tyr Ile Pro His Thr Leu Phe Glu Trp			
65	70	75	80
Asp Phe Gly Lys Glu Ile Cys Val Phe Trp Leu Thr Thr Asp Tyr Leu			
85	90	95	
Leu Cys Thr Ala Ser Val Tyr Asn Ile Val Leu Ile Ser Tyr Asp Arg			
100	105	110	
Tyr Leu Ser Val Ser Asn Ala Val Ser Tyr Arg Thr Gln His Thr Gly			
115	120	125	
Val Leu Lys Ile Val Thr Leu Met Val Ala Val Trp Val Leu Ala Phe			
130	135	140	
Leu Val Asn Gly Pro Met Ile Leu Val Ser Glu Ser Trp Lys Asp Glu			
145	150	155	160
Gly Ser Glu Cys Glu Pro Gly Phe Phe Ser Glu Trp Tyr Ile Leu Ala			
165	170	175	

Aren0054.ST25.txt

Ile Thr Ser Phe Leu Glu Phe Val Ile Pro Val Ile Leu Val Ala Tyr																																																																																																															
180	185	190		Phe Asn Met Asn Ile Tyr Trp Ser Leu Trp Lys Arg Asp His Leu Ser		195	200	205		Arg Cys Gln Ser His Pro Gly Leu Thr Ala Val Ser Ser Asn Ile Cys		210	215	220		Gly His Ser Phe Arg Gly Arg Leu Ser Ser Arg Arg Ser Leu Ser Ala		225	230	235	240	Ser Thr Glu Val Pro Ala Ser Phe His Ser Glu Arg Gln Arg Arg Lys		245	250	255		Ser Ser Leu Met Phe Ser Ser Arg Thr Lys Met Asn Ser Asn Thr Ile		260	265	270		Ala Ser Lys Met Gly Ser Phe Ser Gln Ser Asp Ser Val Ala Leu His		275	280	285		Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser		290	295	300		Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser		305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31
190																																																																																																															
Phe Asn Met Asn Ile Tyr Trp Ser Leu Trp Lys Arg Asp His Leu Ser																																																																																																															
195	200	205		Arg Cys Gln Ser His Pro Gly Leu Thr Ala Val Ser Ser Asn Ile Cys		210	215	220		Gly His Ser Phe Arg Gly Arg Leu Ser Ser Arg Arg Ser Leu Ser Ala		225	230	235	240	Ser Thr Glu Val Pro Ala Ser Phe His Ser Glu Arg Gln Arg Arg Lys		245	250	255		Ser Ser Leu Met Phe Ser Ser Arg Thr Lys Met Asn Ser Asn Thr Ile		260	265	270		Ala Ser Lys Met Gly Ser Phe Ser Gln Ser Asp Ser Val Ala Leu His		275	280	285		Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser		290	295	300		Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser		305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31						
205																																																																																																															
Arg Cys Gln Ser His Pro Gly Leu Thr Ala Val Ser Ser Asn Ile Cys																																																																																																															
210	215	220		Gly His Ser Phe Arg Gly Arg Leu Ser Ser Arg Arg Ser Leu Ser Ala		225	230	235	240	Ser Thr Glu Val Pro Ala Ser Phe His Ser Glu Arg Gln Arg Arg Lys		245	250	255		Ser Ser Leu Met Phe Ser Ser Arg Thr Lys Met Asn Ser Asn Thr Ile		260	265	270		Ala Ser Lys Met Gly Ser Phe Ser Gln Ser Asp Ser Val Ala Leu His		275	280	285		Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser		290	295	300		Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser		305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31												
220																																																																																																															
Gly His Ser Phe Arg Gly Arg Leu Ser Ser Arg Arg Ser Leu Ser Ala																																																																																																															
225	230	235	240	Ser Thr Glu Val Pro Ala Ser Phe His Ser Glu Arg Gln Arg Arg Lys		245	250	255		Ser Ser Leu Met Phe Ser Ser Arg Thr Lys Met Asn Ser Asn Thr Ile		260	265	270		Ala Ser Lys Met Gly Ser Phe Ser Gln Ser Asp Ser Val Ala Leu His		275	280	285		Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser		290	295	300		Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser		305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																		
235	240																																																																																																														
Ser Thr Glu Val Pro Ala Ser Phe His Ser Glu Arg Gln Arg Arg Lys																																																																																																															
245	250	255		Ser Ser Leu Met Phe Ser Ser Arg Thr Lys Met Asn Ser Asn Thr Ile		260	265	270		Ala Ser Lys Met Gly Ser Phe Ser Gln Ser Asp Ser Val Ala Leu His		275	280	285		Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser		290	295	300		Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser		305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																								
255																																																																																																															
Ser Ser Leu Met Phe Ser Ser Arg Thr Lys Met Asn Ser Asn Thr Ile																																																																																																															
260	265	270		Ala Ser Lys Met Gly Ser Phe Ser Gln Ser Asp Ser Val Ala Leu His		275	280	285		Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser		290	295	300		Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser		305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																														
270																																																																																																															
Ala Ser Lys Met Gly Ser Phe Ser Gln Ser Asp Ser Val Ala Leu His																																																																																																															
275	280	285		Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser		290	295	300		Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser		305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																																				
285																																																																																																															
Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser																																																																																																															
290	295	300		Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser		305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																																										
300																																																																																																															
Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser																																																																																																															
305	310	315	320	Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys		325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																																																
315	320																																																																																																														
Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys																																																																																																															
325	330	335		Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe		340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																																																						
335																																																																																																															
Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe																																																																																																															
340	345	350		Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala		355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																																																												
350																																																																																																															
Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala																																																																																																															
355	360	365		Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His		370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																																																																		
365																																																																																																															
Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His																																																																																																															
370	375	380		Ser Arg Ser Val Ser Ser		385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																																																																								
380																																																																																																															
Ser Arg Ser Val Ser Ser																																																																																																															
385	390	<210> 15		<211> 30		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 15		ggaaagctta acgatccccca ggagcaacat	30	<210> 16		<211> 31		<212> DNA		<213> Artificial		<220>		<223> Novel Sequence		<400> 16		ctgggatcctt acgagagcat ttttcacaca g	31																																																																														
<210> 15																																																																																																															
<211> 30																																																																																																															
<212> DNA																																																																																																															
<213> Artificial																																																																																																															
<220>																																																																																																															
<223> Novel Sequence																																																																																																															
<400> 15																																																																																																															
ggaaagctta acgatccccca ggagcaacat	30																																																																																																														
<210> 16																																																																																																															
<211> 31																																																																																																															
<212> DNA																																																																																																															
<213> Artificial																																																																																																															
<220>																																																																																																															
<223> Novel Sequence																																																																																																															
<400> 16																																																																																																															
ctgggatcctt acgagagcat ttttcacaca g	31																																																																																																														

Aren0054.ST25.txt

<210> 17
<211> 1128
<212> DNA
<213> Homo sapiens

<400> 17
atggcgaacg cgagcgagcc gggtggcagc ggcggcggcg aggccgcgc cctgggcctc 60
aagctggcca cgctcagcct gctgctgtgc gtgagcctag cggcaacgt gctgttcgcg 120
ctgctgatcg tgcgggagcg cagcctgcac cgcgcggcgt actacctgct gctgacactg 180
tgcctggccg acgggctgcg cgcgcgtgcc tgccctccgg ccgtcatgct ggcggcgcgg 240
cgtgcggcgg ccgcggcggg ggcgcgcgc ggcgcgctgg gctgcaagct gctgccttc 300
ctggccgcgc tcttctgctt ccacggcgc ttccctgctgc tggcgtggg cgtcaccgc 360
tacctggcca tcgcgcacca ccgccttat gcagagcgcc tggccggctg gccgtgcgc 420
gccatgctgg tgtgcgcgc ctggcgctg gcgcgtggccg cggccttccc gccagtgtg 480
gacggcggtg ggcgcacga ggacgcgcgc tgccgcctgg agcagcggcc gcacggcgc 540
cccgccgcgc tggcgttcct gctgctgctg gccgtggtgg tggcgcacac gcacctcg 600
tacccgcgc tgctcttctt catccacgc cggcgaaga tgccgcgcgc ggcctgg 660
cccgccgtca gccacgactg gacccacac ggcggggcg ccaccggca ggcggccgc 720
aactggacgg cggcgttcgg ccgcggccccc acgcccgcgc cgcttggg catccggccc 780
gcaggggccgg ggcgcggcgc gcgcgcgcctc ctcgtgtgg aagaattcaa gacggagaag 840
aggctgtgca agatgttcta cgcgcgtcacg ctgcgtttcc tgctcctctg gggccctac 900
gtcgtggcca gctacctgcg gtcctggcggccgc ccgtccccca ggcctacctg 960
acggcctccg tgtggctgac cttcgccagc gccggcatca accccgtcgt gtgcttcctc 1020
ttcaacaggg agctgagggc ctgcgttccg gcccagttcc ctcgtgtggca gagccccgg 1080
accacccagg cgacccatcc ctgcgacactg aaaggcattg gtttatga 1128

<210> 18
<211> 375
<212> PRT
<213> Homo sapiens

<400> 18

Met Ala Asn Ala Ser Glu Pro Gly Gly Ser Gly Gly Gly Glu Ala Ala
1 5 10 15

Ala Leu Gly Leu Lys Leu Ala Thr Leu Ser Leu Leu Cys Val Ser
20 25 30

Leu Ala Gly Asn Val Leu Phe Ala Leu Leu Ile Val Arg Glu Arg Ser
35 40 45

Leu His Arg Ala Pro Tyr Tyr Leu Leu Leu Asp Leu Cys Leu Ala Asp
50 55 60

Aren0054.ST25.txt

Gly Leu Arg Ala Leu Ala Cys Leu Pro Ala Val Met Leu Ala Ala Arg
65 70 75 80

Arg Ala Ala Ala Ala Gly Ala Pro Pro Gly Ala Leu Gly Cys Lys
85 90 95

Leu Leu Ala Phe Leu Ala Ala Leu Phe Cys Phe His Ala Ala Phe Leu
100 105 110

Leu Leu Gly Val Gly Val Thr Arg Tyr Leu Ala Ile Ala His His Arg
115 120 125

Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu Val
130 135 140

Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Phe Pro Pro Val Leu
145 150 155 160

Asp Gly Gly Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu Gln Arg
165 170 175

Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu Leu Ala Val
180 185 190

Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe Phe Ile
195 200 205

His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala Val Ser
210 215 220

His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala Ala Ala
225 230 235 240

Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala Leu Val
245 250 255

Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu Leu Val
260 265 270

Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe Tyr Ala
275 280 285

Val Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val Ala Ser
290 295 300

Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala Tyr Leu
305 310 315 320

Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn Pro Val
325 330 335

Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg Ala Gln
340 345 350

Phe Pro Cys Cys Gln Ser Pro Arg Thr Thr Gln Ala Thr His Pro Cys
355 360 365

Asp Leu Lys Gly Ile Gly Leu
370 375

<210> 19
<211> 1002
<212> DNA
<213> Homo sapiens

Aren0054.ST25.txt

<400>	19					
atgaacacca	cagtgatgca	aggcttcaac	agatctgagc	ggtgccccag	agacactcg	60
atagtacagc	tggtattccc	agccctctac	acagtggtt	tcttgaccgg	catcctgctg	120
aatactttgg	ctctgtgggt	gtttgtcac	atccccagct	cctccacctt	catcatctac	180
ctcaaaaaca	cttggtggc	cgacttgata	atgacactca	tgcttcctt	caaaatcctc	240
tctgactcac	acctggcacc	ctggcagctc	agagctttg	tgtgtcg	ttcttcgg	300
atattttatg	agaccatgta	tgtggcata	gtgctgttag	ggctcatagc	ctttgacaga	360
ttcctaaga	tcatcagacc	tttggaaat	attttctaa	aaaaacctgt	ttttgcaaaa	420
acggctcaa	tcttcatctg	gttcttttg	ttcttcatct	ccctgcaaa	tacgatctg	480
agcaacaagg	aagcaacacc	atcgctgtg	aaaaagtgt	cttccttaaa	ggggcctctg	540
gggctgaaat	ggcatcaa	gttaaataac	atatgccagt	ttatttctg	gactgtttt	600
atccaatgc	ttgtgttta	tgtggttatt	gcaaaaaaaag	tatatgattc	ttatagaaag	660
tccaaaagta	aggacagaaa	aaacaacaaa	aagctggaag	gcaaagtatt	tgttgtcg	720
gctgtcttct	ttgtgtgtt	tgctccattt	catttgcca	gagttccata	tactcacagt	780
caaaccaca	ataagactga	ctgtagactg	caaaatcaac	tgtttattgc	taaagaaaca	840
actctctttt	tggcagcaac	taacatttg	atggatccct	taatatacat	attcttatgt	900
aaaaaattca	cagaaaagct	accatgtatg	caagggagaa	agaccacagc	atcaagccaa	960
gaaaatcata	gcagtcagac	agacaacata	accttaggct	ga		1002

<210>	20
<211>	333
<212>	PRT
<213>	Homo sapiens
<400>	20

Met Asn Thr Thr Val Met Gln Gly Phe Asn Arg Ser Glu Arg Cys Pro			
1	5	10	15

Arg Asp Thr Arg Ile Val Gln Leu Val Phe Pro Ala Leu Tyr Thr Val		
20	25	30

Val Phe Leu Thr Gly Ile Leu Leu Asn Thr Leu Ala Leu Trp Val Phe		
35	40	45

Val His Ile Pro Ser Ser Thr Phe Ile Ile Tyr Leu Lys Asn Thr		
50	55	60

Leu Val Ala Asp Leu Ile Met Thr Leu Met Leu Pro Phe Lys Ile Leu			
65	70	75	80

Ser Asp Ser His Leu Ala Pro Trp Gln Leu Arg Ala Phe Val Cys Arg		
85	90	95

Phe Ser Ser Val Ile Phe Tyr Glu Thr Met Tyr Val Gly Ile Val Leu		
100	105	110

Leu Gly Leu Ile Ala Phe Asp Arg Phe Leu Lys Ile Ile Arg Pro Leu	
---	--

Aren0054.ST25.txt

115

120

125

Arg Asn Ile Phe Leu Lys Lys Pro Val Phe Ala Lys Thr Val Ser Ile
 130 135 140

Phe Ile Trp Phe Phe Leu Phe Ile Ser Leu Pro Asn Thr Ile Leu
 145 150 155 160

Ser Asn Lys Glu Ala Thr Pro Ser Ser Val Lys Lys Cys Ala Ser Leu
 165 170 175

Lys Gly Pro Leu Gly Leu Lys Trp His Gln Met Val Asn Asn Ile Cys
 180 185 190

Gln Phe Ile Phe Trp Thr Val Phe Ile Leu Met Leu Val Phe Tyr Val
 195 200 205

Val Ile Ala Lys Lys Val Tyr Asp Ser Tyr Arg Lys Ser Lys Ser Lys
 210 215 220

Asp Arg Lys Asn Asn Lys Lys Leu Glu Gly Lys Val Phe Val Val Val
 225 230 235 240

Ala Val Phe Phe Val Cys Phe Ala Pro Phe His Phe Ala Arg Val Pro
 245 250 255

Tyr Thr His Ser Gln Thr Asn Asn Lys Thr Asp Cys Arg Leu Gln Asn
 260 265 270

Gln Leu Phe Ile Ala Lys Glu Thr Thr Leu Phe Leu Ala Ala Thr Asn
 275 280 285

Ile Cys Met Asp Pro Leu Ile Tyr Ile Phe Leu Cys Lys Phe Thr
 290 295 300

Glu Lys Leu Pro Cys Met Gln Gly Arg Lys Thr Thr Ala Ser Ser Gln
 305 310 315 320

Glu Asn His Ser Ser Gln Thr Asp Asn Ile Thr Leu Gly
 325 330

<210> 21
 <211> 1122
 <212> DNA
 <213> Homo sapiens

<400> 21		
atggccaaca ctaccggaga gcctgaggag gtgagcggcg ctctgtcccc accgtccgca	60	
tcaagttatg tgaagctggt actgctggga ctgattatgt gcgtgacgcct ggcgggtaac	120	
gccatcttgt ccctgctggt gctcaaggag cgtgccctgc acaaggctcc ttactacttc	180	
ctgctggacc tgtgcctggc cgatggcata cgctctgccg tctgcttccc ctttgtctg	240	
gcttctgtgc gccacggctc ttcatggacc ttcagtgcac tcagctgcaa gattgtggcc	300	
tttatggccg tgctcttttgc ttccatgcgc gccttcatgc tggtctgcac cagcgtcacc	360	
cgctacatgg ccatcgccca ccaccgcttc tacgccaagc gcatgacact ctggacatgc	420	
gcggctgtca tctgcattggc ctggaccctg tctgtggcca tggccttccc acctgtcttt	480	
gacgtggca cctacaagtt tattcgggag gaggaccagt gcatcttga gcatcgctac	540	

Aren0054.ST25.txt

ttcaaggcca atgacacgct	gggcttcatg cttatgttgg	ctgtgctcat	ggcagctacc	600
catgctgtct acggcaagct	gctcctcttc gagtatcg	ccgc	aagat gaagccagtg	660
cagatggtgc cagccatcag	ccagaactgg acattccatg	gtcccgggc	caccggccag	720
gctgctgcca actggatcg	cggcttggc cgtggccca	tgccaccaac	cctgctgggt	780
atccggcaga atgggcatgc	agccagccgg cggtactgg	gcatggacga	ggtcaagggt	840
gaaaagcgc tggccgcat	gttctacgcg atcacactgc	tcttctgct	cctctggta	900
ccctacatcg tggcctgcta	ctggcgagtg tttgtgaaag	cctgtgtgt	gccccaccgc	960
tacctggcca ctgctgttg	gatgagcttc gcccaggctg	ccgtcaaccc	aattgtctgc	1020
ttcctgctca acaaggacct	caagaagtgc ctgaccactc	acgccccctg	ctggggcaca	1080
ggaggtgccc cggtccca	cggtccca agaacccctac	tgtgtcatgt	ga	1122

<210> 22
<211> 373
<212> PRT
<213> Homo sapiens
<400> 22

Met Ala Asn Thr Thr Gly Glu Pro Glu Glu Val Ser Gly Ala Leu Ser	1	5	10	15
Pro Pro Ser Ala Ser Ala Tyr Val Lys Leu Val Leu Leu Gly Leu Ile	20	25	30	
Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu	35	40	45	
Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu	50	55	60	
Cys Leu Ala Asp Gly Ile Arg Ser Ala Val Cys Phe Pro Phe Val Leu	65	70	75	80
Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys	85	90	95	
Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe	100	105	110	
Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His	115	120	125	
Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile	130	135	140	
Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe	145	150	155	160
Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe	165	170	175	
Glu His Arg Tyr Phe Lys Ala Asn Asp Thr Leu Gly Phe Met Leu Met	180	185	190	
Leu Ala Val Leu Met Ala Ala Thr His Ala Val Tyr Gly Lys Leu Leu				

Aren0054.ST25.txt

195

200

205

Leu Phe Glu Tyr Arg His Arg Lys Met Lys Pro Val Gln Met Val Pro
 210 215 220

Ala Ile Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln
 225 230 235 240

Ala Ala Ala Asn Trp Ile Ala Gly Phe Gly Arg Gly Pro Met Pro Pro
 245 250 255

Thr Leu Leu Gly Ile Arg Gln Asn Gly His Ala Ala Ser Arg Arg Leu
 260 265 270

Leu Gly Met Asp Glu Val Lys Gly Glu Lys Gln Leu Gly Arg Met Phe
 275 280 285

Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val
 290 295 300

Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg
 305 310 315 320

Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gln Ala Ala Val Asn
 325 330 335

Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Thr
 340 345 350

Thr His Ala Pro Cys Trp Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu
 355 360 365

Pro Tyr Cys Val Met
 370

<210> 23

<211> 1053

<212> DNA

<213> Homo sapiens

<400> 23

atggctttgg aacagaacca gtcaacagat tattattatg agaaaaatga aatgaatggc 60

acttatgact acagtcaata tgaattgatc tgtatcaaag aagatgtcag agaatttgca 120

aaagtttcc tccctgtatt cctcacaata gcttcgtca ttggacttgc aggcaattcc 180

atggtagtgg caatttatgc ctattacaag aaacagagaa ccaaaacaga tgtgtacatc 240

ctgaatttgg ctgttagcaga tttactcctt ctattcactc tgccttttg ggctgttaat 300

gcagttcatg ggtggggttt agggaaaata atgtcaaaa taacttcagc cttgtacaca 360

ctaaactttg tctctggaat gcagttctg gcttgcata gcatagacag atatgtggca 420

gtaactaatg tccccagcca atcaggagtg gaaaaaccat gctggatcat ctgtttctgt 480

gtctggatgg ctgccatctt gctgagcata ccccagctgg tttttatac agtaaatgac 540

aatgcttagt gcattcccat tttccccgc taccttagaa catcaatgaa agcattgatt 600

caaatgctag agatctgcat tggatttgta gtacccttc ttattatggg ggtgtgctac 660

tttatcacgg caaggacact catgaagatg ccaaacatta aaatatctcg acccctaaaa 720

Aren0054.ST25.txt

gttctgctca cagtcgttat agttttcatt gtcactcaac tgcctataaa cattgtcaag	780
ttctgccgag ccatagacat catctactcc ctgatcacca gctgcaacat gagcaaacgc	840
atggacatcg ccatccaagt cacagaaagc attgcactct ttcacagctg cctcaaccca	900
atccttatg ttttatggg agcatcttc aaaaactacg ttatgaaagt ggccaagaaa	960
tatgggtcct ggagaagaca gagacaaaagt gtggaggagt ttcctttga ttctgagggt	1020
cctacagagc caaccagtac ttttagcatt taa	1053

<210> 24
<211> 350
<212> PRT
<213> Homo sapiens

<400> 24

Met Ala Leu Glu Gln Asn Gln Ser Thr Asp Tyr Tyr Tyr Glu Glu Asn			
1	5	10	15
Glu Met Asn Gly Thr Tyr Asp Tyr Ser Gln Tyr Glu Leu Ile Cys Ile			
20	25	30	
Lys Glu Asp Val Arg Glu Phe Ala Lys Val Phe Leu Pro Val Phe Leu			
35	40	45	
Thr Ile Ala Phe Val Ile Gly Leu Ala Gly Asn Ser Met Val Val Ala			
50	55	60	
Ile Tyr Ala Tyr Tyr Lys Lys Gln Arg Thr Lys Thr Asp Val Tyr Ile			
65	70	75	80
Leu Asn Leu Ala Val Ala Asp Leu Leu Leu Phe Thr Leu Pro Phe			
85	90	95	
Trp Ala Val Asn Ala Val His Gly Trp Val Leu Gly Lys Ile Met Cys			
100	105	110	
Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe Val Ser Gly Met Gln			
115	120	125	
Phe Leu Ala Cys Ile Ser Ile Asp Arg Tyr Val Ala Val Thr Asn Val			
130	135	140	
Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp Ile Ile Cys Phe Cys			
145	150	155	160
Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro Gln Leu Val Phe Tyr			
165	170	175	
Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile Phe Pro Arg Tyr Leu			
180	185	190	
Gly Thr Ser Met Lys Ala Leu Ile Gln Met Leu Glu Ile Cys Ile Gly			
195	200	205	
Phe Val Val Pro Phe Leu Ile Met Gly Val Cys Tyr Phe Ile Thr Ala			
210	215	220	
Arg Thr Leu Met Lys Met Pro Asn Ile Lys Ile Ser Arg Pro Leu Lys			
225	230	235	240

Aren0054.ST25.txt

Val Leu Leu Thr Val Val Ile Val Phe Ile Val Thr Gln Leu Pro Tyr
 245 250 255

Asn Ile Val Lys Phe Cys Arg Ala Ile Asp Ile Ile Tyr Ser Leu Ile
 260 265 270

Thr Ser Cys Asn Met Ser Lys Arg Met Asp Ile Ala Ile Gln Val Thr
 275 280 285

Glu Ser Ile Ala Leu Phe His Ser Cys Leu Asn Pro Ile Leu Tyr Val
 290 295 300

Phe Met Gly Ala Ser Phe Lys Asn Tyr Val Met Lys Val Ala Lys Lys
 305 310 315 320

Tyr Gly Ser Trp Arg Arg Gln Arg Gln Ser Val Glu Glu Phe Pro Phe
 325 330 335

Asp Ser Glu Gly Pro Thr Glu Pro Thr Ser Thr Phe Ser Ile
 340 345 350

<210> 25

<211> 1116

<212> DNA

<213> Homo sapiens

<400> 25

atgccaggaa acgccacccc agtgaccacc actgccccgt gggcctccct gggcctctcc 60

gccaagacct gcaacaacgt gtccttcgaa gagagcagga tagtccttgt cgtggtgtac 120

agcgcggtgt gcacgctggg ggtccggcc aactgcctga ctgcgtgct ggcgtgctg 180

caggtaactgc agggcaacgt gctggccgtc tacctgctct gcctggcaactg 240

ctgtacacag gcacgctgcc actctgggtc atctatatcc gcaaccagca ccgcgtggacc 300

ctaggcctgc tggcctcgaa ggtgaccgccc tacatcttct tctgcaacat ctacgtcagc 360

atccctttcc tgtgctgcat ctccctgcgac cgcttcgtgg ccgtgggtta cgcgtggag 420

agtcggggcc gccgcccggc gaggaccgccc atcctcatct ccgcctgcat cttcatcctc 480

gtcgggatcg ttcaactaccc ggtgttccag acggaagaca aggagacatg ctttgacatg 540

ctgcagatgg acagcaggat tgccgggtac tactacgcca ggttcacccgt tggctttgcc 600

atccctctct ccatcatcgc cttcaccaac caccggattt tcaggagcat caagcagagc 660

atgggcttaa gcgctgccc gaaggccaag gtgaagcaact cggccatcgc ggtgggtgtc 720

atcttccttag tctgcttcgc cccgtaccac ctggttctcc tcgtcaaagc cgctgcctt 780

tcctactaca gaggagacag gaacgccatg tgccggctgg agggaaaggct gtacacagcc 840

tctgtggtgt ttctgtgcct gtccacgggtg aacggcgtgg ctgaccccat tatctacgtg 900

ctggccacgg accattcccg ccaagaagtg tccagaatcc ataaggggtg gaaagagtg 960

tccatgaaga cagacgtcac caggctcacc cacagcaggg acaccgagga gctgcagtcg 1020

cccggtggccc ttgcagacca ctacaccttc tccaggccccg tgcacccacc agggtcacca 1080

tgccctgcaa agaggctgat tgaggagtcc tgctga 1116

Aren0054.ST25.txt

<210> 26
<211> 371
<212> PRT
<213> Homo sapiens

<400> 26

Met Pro Gly Asn Ala Thr Pro Val Thr Thr Ala Pro Trp Ala Ser
1 5 10 15

Leu Gly Leu Ser Ala Lys Thr Cys Asn Asn Val Ser Phe Glu Glu Ser
20 25 30

Arg Ile Val Leu Val Val Tyr Ser Ala Val Cys Thr Leu Gly Val
35 40 45

Pro Ala Asn Cys Leu Thr Ala Trp Leu Ala Leu Gln Val Leu Gln
50 55 60

Gly Asn Val Leu Ala Val Tyr Leu Leu Cys Leu Ala Leu Cys Glu Leu
65 70 75 80

Leu Tyr Thr Gly Thr Leu Pro Leu Trp Val Ile Tyr Ile Arg Asn Gln
85 90 95

His Arg Trp Thr Leu Gly Leu Leu Ala Ser Lys Val Thr Ala Tyr Ile
100 105 110

Phe Phe Cys Asn Ile Tyr Val Ser Ile Leu Phe Leu Cys Cys Ile Ser
115 120 125

Cys Asp Arg Phe Val Ala Val Val Tyr Ala Leu Glu Ser Arg Gly Arg
130 135 140

Arg Arg Arg Arg Thr Ala Ile Leu Ile Ser Ala Cys Ile Phe Ile Leu
145 150 155 160

Val Gly Ile Val His Tyr Pro Val Phe Gln Thr Glu Asp Lys Glu Thr
165 170 175

Cys Phe Asp Met Leu Gln Met Asp Ser Arg Ile Ala Gly Tyr Tyr Tyr
180 185 190

Ala Arg Phe Thr Val Gly Phe Ala Ile Pro Leu Ser Ile Ile Ala Phe
195 200 205

Thr Asn His Arg Ile Phe Arg Ser Ile Lys Gln Ser Met Gly Leu Ser
210 215 220

Ala Ala Gln Lys Ala Lys Val Lys His Ser Ala Ile Ala Val Val Val
225 230 235 240

Ile Phe Leu Val Cys Phe Ala Pro Tyr His Leu Val Leu Leu Val Lys
245 250 255

Ala Ala Ala Phe Ser Tyr Tyr Arg Gly Asp Arg Asn Ala Met Cys Gly
260 265 270

Leu Glu Glu Arg Leu Tyr Thr Ala Ser Val Val Phe Leu Cys Leu Ser
275 280 285

Thr Val Asn Gly Val Ala Asp Pro Ile Ile Tyr Val Leu Ala Thr Asp
290 295 300

Aren0054.ST25.txt

His Ser Arg Gln Glu Val Ser Arg Ile His Lys Gly Trp Lys Glu Trp
305 310 315 320

Ser Met Lys Thr Asp Val Thr Arg Leu Thr His Ser Arg Asp Thr Glu
325 330 335

Glu Leu Gln Ser Pro Val Ala Leu Ala Asp His Tyr Thr Phe Ser Arg
340 345 350

Pro Val His Pro Pro Gly Ser Pro Cys Pro Ala Lys Arg Leu Ile Glu
355 360 365

Glu Ser Cys
370

<210> 27
<211> 1113
<212> DNA
<213> Homo sapiens

<400> 27
atggcgaact atagccatgc agctgacaac attttgcaaa atctctcgcc tctaacagcc 60
tttctgaaac tgacttcctt gggtttcata ataggagtca gcgtgggtgg caacctcctg 120
atctccattt tgcttagtgaa agataagacc ttgcatacgag caccttacta cttccctgtt 180
gatctttgct gttcagatat cctcagatct gcaatttgtt tcccatttgt gttcaactct 240
gtcaaaaatg gctctacctg gacttatggg actctgactt gcaaagtgtat tgcctttctg 300
ggggtttgtt cctgtttcca cactgcttgc atgctttctt gcatcagtgt caccagatac 360
ttagctatcg cccatcacccg cttctataca aagaggctga ccttttgac gtgtctggct 420
gtgatctgta tgggtgtggac tctgtctgtg gccatggcat ttccccgggt ttttagacgtg 480
ggcacttact cattcattag ggaggaagat caatgcaccc tccaaacacccg ctccctcagg 540
gctaattgatt ccttaggatt tatgctgtt cttgctctca tcctccttagc cacacagctt 600
gtctacctca agctgatatt tttcggtccac gatcgaagaa aaatgaagcc agtccagtt 660
gttagcagcag tcagccagaa ctggactttt catggctctg gagccagttt ccaggcagct 720
gccaattggc tagcaggatt tggaaagggtt cccacaccac ccaccttgct gggcatcagg 780
caaaatgcaa acaccacagg cagaagaagg ctattggct tagacgagtt caaaatggag 840
aaaagaatca gcagaatgtt ctatataatg acttttctgt ttctaacctt gtggggcccc 900
tacctggtgg cctgttattt gagagttttt gcaagagggc ctgttagtacc agggggattt 960
ctaacagctg ctgtctggat gagtttgcc caagcaggaa tcaatcctt tgtctgcatt 1020
ttctcaaaca gggagctgag gcgctgttgc agcacaaccc ttctttactg cagaaaatcc 1080
agtttaccaa gggAACCTTA ctgtgttata tga 1113

<210> 28
<211> 370
<212> PRT
<213> Homo sapiens

Aren0054.ST25.txt

<400> 28

Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser
1 5 10 15

Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly
20 25 30

Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp
35 40 45

Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
50 55 60

Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
65 70 75 80

Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val
85 90 95

Ile Ala Phe Leu Gly Val Leu Ser Cys Phe His Thr Ala Phe Met Leu
100 105 110

Phe Cys Ile Ser Val Thr Arg Tyr Leu Ala Ile Ala His His Arg Phe
115 120 125

Tyr Thr Lys Arg Leu Thr Phe Trp Thr Cys Leu Ala Val Ile Cys Met
130 135 140

Val Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Leu Asp Val
145 150 155 160

Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His
165 170 175

Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Ala
180 185 190

Leu Ile Leu Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe
195 200 205

Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val
210 215 220

Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala
225 230 235 240

Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu
245 250 255

Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu
260 265 270

Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr
275 280 285

Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala
290 295 300

Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Val Pro Gly Gly Phe
305 310 315 320

Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro
325 330 335

Aren0054.ST25.txt

Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr
340 345 350

Thr Leu Leu Tyr Cys Arg Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys
355 360 365

Val Ile
370

<210> 29
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 29
atgcaggcggccaaacac cggccggac aacgcgacgc tgcatgtct gcgaaaccggcc
gcatcgccggccatgttttgcgttgtac tcgttgtgg cggcggtca gatccccggc
aaccttttc tctgtgggt gctgtgccgg cgcatggggc ccagatcccc gtcggtcatt
ttcatgtatca acctgagcgt cacggacctg atgctggcca gcgtgttgcc tttccaaatc
tactaccatt gcaaccggcca ccactgggtta ttccgggtgc tgctttgca cgtggtgacc
gtggcctttt acgcaaacat gtattccagc atcctcacca tgacctgtat cagcgtggag
cgcttcctgg gggtcctgtta cccgctcagc tccaagcgct ggccggccgg tcgttacgc
gtggccgcgt gtgcaggac ctggctgctg ctccgtaccg ccctgtgccc gctggcgcc
accgatctca cctaccgggt gcacggccctg ggcatcatca cctgcttcga cgtcctcaag
tggacgatgc tccccagcgt ggccatgtgg gccgtgttcc tcttcaccat cttcatcctg
ctgttcctca tcccggtcgatcaccgtg gtttgcata cggccaccat cctcaagctg
ttgcgcacgg aggaggcgca cggccggag cagcggaggc gcgcgggtgg cctggccgc
gtggtcttgc tggcctttgt cacctgcttc gcccccaaca acttcgtgtct cctggcgac
atcgtgagcc gcctgttcta cggcaagagc tactaccacg tgtacaagct cacgctgtgt
ctcagctgcc tcaacaactg tctggacccg tttgtttatt actttgcgtc ccggaaattc
cagctgcgcc tgcgggata tttgggctgc cggccgggtgc ccagagacac cctggacac
cgccgcgaga gcctttctc cggcaggacc acgtccgtgc gctccgaggc cggtgccgc
cctgaaggga tggagggagc caccaggccc ggcctccaga ggcaggagag tgtgttctga 1080

<210> 30
<211> 359
<212> PRT
<213> Homo sapiens

<400> 30

Met Gln Val Pro Asn Ser Thr Gly Pro Asp Asn Ala Thr Leu Gln Met
1 5 10 15

Leu Arg Asn Pro Ala Ile Ala Val Ala Leu Pro Val Val Tyr Ser Leu
20 25 30

Aren0054.ST25.txt

Val Ala Ala Val Ser Ile Pro Gly Asn Leu Phe Ser Leu Trp Val Leu
35 40 45

Cys Arg Arg Met Gly Pro Arg Ser Pro Ser Val Ile Phe Met Ile Asn
50 55 60

Leu Ser Val Thr Asp Leu Met Leu Ala Ser Val Leu Pro Phe Gln Ile
65 70 75 80

Tyr Tyr His Cys Asn Arg His His Trp Val Phe Gly Val Leu Leu Cys
85 90 95

Asn Val Val Thr Val Ala Phe Tyr Ala Asn Met Tyr Ser Ser Ile Leu
100 105 110

Thr Met Thr Cys Ile Ser Val Glu Arg Phe Leu Gly Val Leu Tyr Pro
115 120 125

Leu Ser Ser Lys Arg Trp Arg Arg Arg Tyr Ala Val Ala Ala Cys
130 135 140

Ala Gly Thr Trp Leu Leu Leu Leu Thr Ala Leu Cys Pro Leu Ala Arg
145 150 155 160

Thr Asp Leu Thr Tyr Pro Val His Ala Leu Gly Ile Ile Thr Cys Phe
165 170 175

Asp Val Leu Lys Trp Thr Met Leu Pro Ser Val Ala Met Trp Ala Val
180 185 190

Phe Leu Phe Thr Ile Phe Ile Leu Leu Phe Leu Ile Pro Phe Val Ile
195 200 205

Thr Val Ala Cys Tyr Thr Ala Thr Ile Leu Lys Leu Leu Arg Thr Glu
210 215 220

Glu Ala His Gly Arg Glu Gln Arg Arg Arg Ala Val Gly Leu Ala Ala
225 230 235 240

Val Val Leu Ala Phe Val Thr Cys Phe Ala Pro Asn Asn Phe Val
245 250 255

Leu Leu Ala His Ile Val Ser Arg Leu Phe Tyr Gly Lys Ser Tyr Tyr
260 265 270

His Val Tyr Lys Leu Thr Leu Cys Leu Ser Cys Leu Asn Asn Cys Leu
275 280 285

Asp Pro Phe Val Tyr Tyr Phe Ala Ser Arg Glu Phe Gln Leu Arg Leu
290 295 300

Arg Glu Tyr Leu Gly Cys Arg Arg Val Pro Arg Asp Thr Leu Asp Thr
305 310 315 320

Arg Arg Glu Ser Leu Phe Ser Ala Arg Thr Thr Ser Val Arg Ser Glu
325 330 335

Ala Gly Ala His Pro Glu Gly Met Glu Gly Ala Thr Arg Pro Gly Leu
340 345 350

Gln Arg Gln Glu Ser Val Phe
355

<210> 31
<211> 1503

Aren0054.ST25.txt

<212> DNA
<213> Homo sapiens

<400>	31						
atggagcg	cctgggagga	cagccaggc	ccggagggggg	cagctgaggg	ctcgcc	tgtg	60
ccagtgc	ccggggcgc	ctccgg	gccg	cgactg	gcacagg	ctg	120
gctgagtg	ccggacccaa	ggggaggggg	caactg	ctgg	cgaccgc	cccttgc	180
cgctggcc	ccccctcg	tgccag	ctcc	agccc	ccggag	gtccg	240
tcggttca	ag	gcagcgc	tgcggt	gcacg	ggcgc	ttgggc	300
cggccatgg	agtcggg	gctgcgg	gcgc	cggt	gcgc	cgat	360
tacaactaca	ccggcaag	ctcggt	agctacc	cggtgc	cctgc	gcgc	420
gacgcgtgg	tgtgc	ctgg	ttcatcg	tc	tagagaat	ct	480
tttgtgctcg	gacgccac	ccgc	ttcc	catgt	tc	tttgtc	540
acgttgtc	atctg	ctgg	aggccc	tacg	ccca	acatc	600
ctcacgctga	aactgt	cccc	cgc	ctctgg	ttcg	cacggg	660
ctcactgc	ccgt	gtctg	ag	ccctgg	atcg	cgctgg	720
cgcagg	ccgc	cccg	ctcc	agtc	ggc	gcac	780
tgggcgtgt	cgct	gtct	cgt	ccag	cgct	gttgc	840
ctggacgc	cttcc	actgt	cttgc	ccat	cctac	gtgt	900
ctcgcc	ttcg	tggc	atc	ttcc	gttgc	actgtc	960
gtacgc	ccgc	ccgc	ctgc	ccgg	gttgc	atgc	1020
cgggcgc	gcaagcc	ccgc	ctct	ccgg	ttgt	gcgc	1080
gccttgtgg	catgtt	gggg	cccc	cttc	ctgt	gtctgc	1140
gcgcgcac	cttgc	tact	ccctgt	gttgc	acttcc	ttcc	1200
tcacttctga	acccat	cat	ctacac	gc	accacc	gttgc	1260
cgccttgc	tgtcg	ggac	ccact	ctgc	ggc	agagac	1320
gcgcgc	ctgagg	cttc	cgggc	cgt	tgc	ccat	1380
agcttc	atcg	gtcg	ggac	ctcat	gcgc	tc	1440
acaggc	ccgg	tgca	cac	ccgc	cgact	ctgg	1500
tga							1503

<210> 32
<211> 500
<212> PRT
<213> Homo sapiens

<400> 32

Met Glu Arg Pro Trp Glu Asp Ser Pro Gly Pro Glu Gly Ala Ala Glu

Aren0054.ST25.txt

1	5	10	15
Gly Ser Pro Val Pro Val Ala Ala Gly Ala Arg Ser Gly Ala Ala Ala			
20	25	30	
Ser Gly Thr Gly Trp Gln Pro Trp Ala Glu Cys Pro Gly Pro Lys Gly			
35	40	45	
Arg Gly Gln Leu Leu Ala Thr Ala Gly Pro Leu Arg Arg Trp Pro Ala			
50	55	60	
Pro Ser Pro Ala Ser Ser Ser Pro Ala Pro Gly Ala Ala Ser Ala His			
65	70	75	80
Ser Val Gln Gly Ser Ala Thr Ala Gly Gly Ala Arg Pro Gly Arg Arg			
85	90	95	
Pro Trp Gly Ala Arg Pro Met Glu Ser Gly Leu Leu Arg Pro Ala Pro			
100	105	110	
Val Ser Glu Val Ile Val Leu His Tyr Asn Tyr Thr Gly Lys Leu Arg			
115	120	125	
Gly Ala Ser Tyr Gln Pro Gly Ala Gly Leu Arg Ala Asp Ala Val Val			
130	135	140	
Cys Leu Ala Val Cys Ala Phe Ile Val Leu Glu Asn Leu Ala Val Leu			
145	150	155	160
Leu Val Leu Gly Arg His Pro Arg Phe His Ala Pro Met Phe Leu Leu			
165	170	175	
Leu Gly Ser Leu Thr Leu Ser Asp Leu Leu Ala Gly Ala Ala Tyr Ala			
180	185	190	
Ala Asn Ile Leu Leu Ser Gly Pro Leu Thr Leu Lys Leu Ser Pro Ala			
195	200	205	
Leu Trp Phe Ala Arg Glu Gly Val Phe Val Ala Leu Thr Ala Ser			
210	215	220	
Val Leu Ser Leu Leu Ala Ile Ala Leu Glu Arg Ser Leu Thr Met Ala			
225	230	235	240
Arg Arg Gly Pro Ala Pro Val Ser Ser Arg Gly Arg Thr Leu Ala Met			
245	250	255	
Ala Ala Ala Ala Trp Gly Val Ser Leu Leu Leu Gly Leu Leu Pro Ala			
260	265	270	
Leu Gly Trp Asn Cys Leu Gly Arg Leu Asp Ala Cys Ser Thr Val Leu			
275	280	285	
Pro Leu Tyr Ala Lys Ala Tyr Val Leu Phe Cys Val Leu Ala Phe Val			
290	295	300	
Gly Ile Leu Ala Ala Ile Cys Ala Leu Tyr Ala Arg Ile Tyr Cys Gln			
305	310	315	320
Val Arg Ala Asn Ala Arg Arg Leu Pro Ala Arg Pro Gly Thr Ala Gly			
325	330	335	
Thr Thr Ser Thr Arg Ala Arg Arg Lys Pro Arg Ser Leu Ala Leu Leu			
340	345	350	

Aren0054.ST25.txt

Arg Thr Leu Ser Val Val Leu Leu Ala Phe Val Ala Cys Trp Gly Pro
355 360 365

Leu Phe Leu Leu Leu Leu Asp Val Ala Cys Pro Ala Arg Thr Cys
370 375 380

Pro Val Leu Leu Gln Ala Asp Pro Phe Leu Gly Leu Ala Met Ala Asn
385 390 395 400

Ser Leu Leu Asn Pro Ile Ile Tyr Thr Leu Thr Asn Arg Asp Leu Arg
405 410 415

His Ala Leu Leu Arg Leu Val Cys Cys Gly Arg His Ser Cys Gly Arg
420 425 430

Asp Pro Ser Gly Ser Gln Gln Ser Ala Ser Ala Ala Glu Ala Ser Gly
435 440 445

Gly Leu Arg Arg Cys Leu Pro Pro Gly Leu Asp Gly Ser Phe Ser Gly
450 455 460

Ser Glu Arg Ser Ser Pro Gln Arg Asp Gly Leu Asp Thr Ser Gly Ser
465 470 475 480

Thr Gly Ser Pro Gly Ala Pro Thr Ala Ala Arg Thr Leu Val Ser Glu
485 490 495

Pro Ala Ala Asp
500

<210> 33

<211> 1029

<212> DNA

<213> Homo sapiens

<400> 33

atgcaagccg tcgacaatct cacctctgcg cctggaaaca ccagtctgtg caccagagac 60

tacaaaatca cccaggtcct cttcccactg ctctacactg tcctgtttt tgttggactt 120

atcacaaatg gcctggcgat gaggatttc tttcaaattcc ggagtaaatc aaaccttatt 180

attttctta agaacacagt catttctgat cttctcatga ttctgacttt tccattcaaa 240

attcttagtg atgccaaact gggAACAGGA ccactgagaa cttttgtgtg tcaagttacc 300

tccgtcatat tttatTCAC aatgtatATC agtatttcat tcctggact gataactatc 360

gatcgctacc agaAGACCAC caggCCATT AAAACATCCA ACCCCAAAAA tctctgggg 420

gctaagattc tctctgttgt catctggca ttcatgttct tactctctt gcctaACATG 480

attctgacca acaggcAGCC gagAGACAAG aATGTGAAGA aATGCTCTT CCTTAATCA 540

gagTCGGTC tagtctggca tGAAATAGTA aattACATCT gtcaAGTCAT tttCTGGATT 600

aatttcttaa ttgttattgt atgttataca ctcattacaa aagaACTGTA CGGTcatac 660

gtaAGAACGA ggggtgtAGG taaAGTCCCC AGGAAAAAGG tGAACGTCAA AGTTTCATT 720

atcattgctg tattCTTTAT ttgtttgtt ccttCCATT ttGCCCGAAT tccttACACC 780

ctgagccaaa cccgggatgt ctTGACTGC ACTGCTGAAA atactCTGTT CTATGTGAAA 840

gagAGCACTC TGTGGTAAc ttCCCTTAAAT GCAcGCTGG ATCCGTTCAT CTATTTTC 900

Aren0054.ST25.txt

ctttgcaagt ctttcagaaa ttccttgata agtatgctga agtgcccaa ttctgcaaca 960
tctctgtccc aggacaatag gaaaaaaagaa caggatggtg gtgacccaaa tgaagagact 1020
ccaatgtaa 1029

<210> 34
<211> 342
<212> PRT
<213> Homo sapiens

<400> 34

Met Gln Ala Val Asp Asn Leu Thr Ser Ala Pro Gly Asn Thr Ser Leu
1 5 10 15

Cys Thr Arg Asp Tyr Lys Ile Thr Gln Val Leu Phe Pro Leu Leu Tyr
20 25 30

Thr Val Leu Phe Phe Val Gly Leu Ile Thr Asn Gly Leu Ala Met Arg
35 40 45

Ile Phe Phe Gln Ile Arg Ser Lys Ser Asn Phe Ile Ile Phe Leu Lys
50 55 60

Asn Thr Val Ile Ser Asp Leu Leu Met Ile Leu Thr Phe Pro Phe Lys
65 70 75 80

Ile Leu Ser Asp Ala Lys Leu Gly Thr Gly Pro Leu Arg Thr Phe Val
85 90 95

Cys Gln Val Thr Ser Val Ile Phe Tyr Phe Thr Met Tyr Ile Ser Ile
100 105 110

Ser Phe Leu Gly Leu Ile Thr Ile Asp Arg Tyr Gln Lys Thr Thr Arg
115 120 125

Pro Phe Lys Thr Ser Asn Pro Lys Asn Leu Leu Gly Ala Lys Ile Leu
130 135 140

Ser Val Val Ile Trp Ala Phe Met Phe Leu Leu Ser Leu Pro Asn Met
145 150 155 160

Ile Leu Thr Asn Arg Gln Pro Arg Asp Lys Asn Val Lys Lys Cys Ser
165 170 175

Phe Leu Lys Ser Glu Phe Gly Leu Val Trp His Glu Ile Val Asn Tyr
180 185 190

Ile Cys Gln Val Ile Phe Trp Ile Asn Phe Leu Ile Val Ile Val Cys
195 200 205

Tyr Thr Leu Ile Thr Lys Glu Leu Tyr Arg Ser Tyr Val Arg Thr Arg
210 215 220

Gly Val Gly Lys Val Pro Arg Lys Lys Val Asn Val Lys Val Phe Ile
225 230 235 240

Ile Ile Ala Val Phe Phe Ile Cys Phe Val Pro Phe His Phe Ala Arg
245 250 255

Ile Pro Tyr Thr Leu Ser Gln Thr Arg Asp Val Phe Asp Cys Thr Ala
260 265 270

Aren0054.ST25.txt

Glu Asn Thr Leu Phe Tyr Val Lys Glu Ser Thr Leu Trp Leu Thr Ser
275 280 285

Leu Asn Ala Cys Leu Asp Pro Phe Ile Tyr Phe Phe Leu Cys Lys Ser
290 295 300

Phe Arg Asn Ser Leu Ile Ser Met Leu Lys Cys Pro Asn Ser Ala Thr
305 310 315 320

Ser Leu Ser Gln Asp Asn Arg Lys Lys Glu Gln Asp Gly Gly Asp Pro
325 330 335

Asn Glu Glu Thr Pro Met
340

<210> 35

<211> 1077

<212> DNA

<213> Homo sapiens

<400> 35

atgtcggtct gctaccgtcc cccagggAAC gagacactgc tgagctggaa gacttcgcgg 60

gccacaggca cagccttcct gctgctggcg gcgcgtctgg ggctgcctgg caacggcttc 120

gtggtgttggaa gcttggcgccc ctggcgccct gcacgggggc gaccgctggc ggccacgctt 180

gtgctgcacc tggcgctggc cgacggcgcg gtgctgtgc tcacgcccgt ctttgtggcc 240

tccctgaccc ggcaggcctg gccgctggc caggcgggct gcaaggcggt gtactacgtg 300

tgcgcgctca gcatgtacgc cagcgtgctg ctcaccggcc tgctcagccct gcagcgctgc 360

ctcgcgatca cccgccccctt cctggcgccct cggctgcgcgac gcccggccct ggccggccgc 420

ctgctgctgg cggctctggct ggccggccctg ttgctcgccg tcccgccgc cgtctaccgc 480

cacctgttggaa gggaccgcgt atgcccagctg tgccaccgcgt cgccggtcca cgccggccgc 540

cacctgagcc tggagactct gaccgcttgc gtgcttcctt tcgggctgat gctcggtgc 600

tacagcgtga cgctggcacg gctgcggggc gcccgtggg gctccggcg gcacggggcg 660

cgggtgggccc ggctggtgag cgccatcggt cttgccttcg gcttgcgtcg ggcccccatac 720

cacgcagtca accttctgca ggccgtcgca gcgcgtggctc caccggaaagg ggccttggcg 780

aagctggcg gagccggcca ggccggcgca gcgggaacta cggccttggc cttttcagt 840

tctagcgtca acccggtgtct acgtcttc accgctggag atctgctgcc ccgggcaggt 900

ccccgtttcc tcacgcggct cttcaaggc tctggggagg cccgaggggg cggccgctct 960

agggaaggga ccatggagct ccgaactacc cctcagctga aagtggtgaa gcagggccgc 1020

ggcaatggag acccgggggg tggatggag aaggacggtc cggaatggaa ccttta 1077

<210> 36

<211> 358

<212> PRT

<213> Homo sapiens

<400> 36

Aren0054.ST25.txt

Met Ser Val Cys Tyr Arg Pro Pro Gly Asn Glu Thr Leu Leu Ser Trp
1 5 10 15

Lys Thr Ser Arg Ala Thr Gly Thr Ala Phe Leu Leu Leu Ala Ala Leu
20 25 30

Leu Gly Leu Pro Gly Asn Gly Phe Val Val Trp Ser Leu Ala Gly Trp
35 40 45

Arg Pro Ala Arg Gly Arg Pro Leu Ala Ala Thr Leu Val Leu His Leu
50 55 60

Ala Leu Ala Asp Gly Ala Val Leu Leu Leu Thr Pro Leu Phe Val Ala
65 70 75 80

Phe Leu Thr Arg Gln Ala Trp Pro Leu Gly Gln Ala Gly Cys Lys Ala
85 90 95

Val Tyr Tyr Val Cys Ala Leu Ser Met Tyr Ala Ser Val Leu Leu Thr
100 105 110

Gly Leu Leu Ser Leu Gln Arg Cys Leu Ala Val Thr Arg Pro Phe Leu
115 120 125

Ala Pro Arg Leu Arg Ser Pro Ala Leu Ala Arg Arg Leu Leu Leu Ala
130 135 140

Val Trp Leu Ala Ala Leu Leu Leu Ala Val Pro Ala Ala Val Tyr Arg
145 150 155 160

His Leu Trp Arg Asp Arg Val Cys Gln Leu Cys His Pro Ser Pro Val
165 170 175

His Ala Ala Ala His Leu Ser Leu Glu Thr Leu Thr Ala Phe Val Leu
180 185 190

Pro Phe Gly Leu Met Leu Gly Cys Tyr Ser Val Thr Leu Ala Arg Leu
195 200 205

Arg Gly Ala Arg Trp Gly Ser Gly Arg His Gly Ala Arg Val Gly Arg
210 215 220

Leu Val Ser Ala Ile Val Leu Ala Phe Gly Leu Leu Trp Ala Pro Tyr
225 230 235 240

His Ala Val Asn Leu Leu Gln Ala Val Ala Ala Leu Ala Pro Pro Glu
245 250 255

Gly Ala Leu Ala Lys Leu Gly Gly Ala Gly Gln Ala Ala Arg Ala Gly
260 265 270

Thr Thr Ala Leu Ala Phe Phe Ser Ser Ser Val Asn Pro Val Leu Tyr
275 280 285

Val Phe Thr Ala Gly Asp Leu Leu Pro Arg Ala Gly Pro Arg Phe Leu
290 295 300

Thr Arg Leu Phe Glu Gly Ser Gly Glu Ala Arg Gly Gly Arg Ser
305 310 315 320

Arg Glu Gly Thr Met Glu Leu Arg Thr Thr Pro Gln Leu Lys Val Val
325 330 335

Gly Gln Gly Arg Gly Asn Gly Asp Pro Gly Gly Met Glu Lys Asp

340

345

350

Gly Pro Glu Trp Asp Leu
 355

<210> 37
 <211> 1005
 <212> DNA
 <213> Homo sapiens

<400> 37	
atgctgggga tcatggcatg gaatgcaact tgcaaaaact ggctggcagc agaggctgcc	60
ctggaaaaagt actacccccc catttttat gggattgagt tcgttgggg agtccttggaa	120
aataccatttgc ttgtttacgg ctacatcttc tctctgaaga actggaacag cagtaatatt	180
tatctcttta acctctctgt ctctgactta gctttctgt gcaccctccc catgctgata	240
aggagttatg ccaatggaaa ctggatatat ggagacgtgc tctgcataag caaccgata	300
gtgcttcatg ccaacctcta taccaggcatt ctctttctca cttttatcag catagatcga	360
tacttgataa ttaagtatcc tttccgagaa cacccctgc aaaagaaaaga gtttgctatt	420
ttaatctcct tggccatttg ggtttttagta accttagagt tactacccat acttccccctt	480
ataaaatcctg ttataactga caatggcacc acctgtaatg attttgcag ttctggagac	540
cccaactaca acctcattta cagcatgtgt ctaacactgt tggggttcct tattcctctt	600
tttggatgtgt gtttctttta ttacaagatt gctctttcc taaagcagag gaataggcag	660
gttgctactg ctctgcccct tgaaaagcct ctcaacttgg tcatacatggc agtggtaatc	720
ttctctgtgc ttttacacc ctatcacgtc atgcggatg tgaggatcgc ttcacgcctg	780
gggagttgga agcagtatca gtgcactcg gtcgtcatca actcctttta cattgtgaca	840
cggccttgg ccttctgaa cagtgtcatc aaccctgtct tctattttct tttgggagat	900
cacttcaggg acatgctgat gaatcaactg agacacaact tcaaattccct tacatcctt	960
agcagatggg ctcataact cctactttca ttcagagaaa agtga	1005

<210> 38
 <211> 334
 <212> PRT
 <213> Homo sapiens

<400> 38

Met Leu Gly Ile Met Ala Trp Asn Ala Thr Cys Lys Asn Trp Leu Ala
 1 5 10 15

Ala Glu Ala Ala Leu Glu Lys Tyr Tyr Leu Ser Ile Phe Tyr Gly Ile
 20 25 30

Glu Phe Val Val Gly Val Leu Gly Asn Thr Ile Val Val Tyr Gly Tyr
 35 40 45

Ile Phe Ser Leu Lys Asn Trp Asn Ser Ser Asn Ile Tyr Leu Phe Asn
 50 55 60

Aren0054.ST25.txt

Leu Ser Val Ser Asp Leu Ala Phe Leu Cys Thr Leu Pro Met Leu Ile
 65 70 75 80
 Arg Ser Tyr Ala Asn Gly Asn Trp Ile Tyr Gly Asp Val Leu Cys Ile
 85 90 95
 Ser Asn Arg Tyr Val Leu His Ala Asn Leu Tyr Thr Ser Ile Leu Phe
 100 105 110
 Leu Thr Phe Ile Ser Ile Asp Arg Tyr Leu Ile Ile Lys Tyr Pro Phe
 115 120 125
 Arg Glu His Leu Leu Gln Lys Lys Glu Phe Ala Ile Leu Ile Ser Leu
 130 135 140
 Ala Ile Trp Val Leu Val Thr Leu Glu Leu Leu Pro Ile Leu Pro Leu
 145 150 155 160
 Ile Asn Pro Val Ile Thr Asp Asn Gly Thr Thr Cys Asn Asp Phe Ala
 165 170 175
 Ser Ser Gly Asp Pro Asn Tyr Asn Leu Ile Tyr Ser Met Cys Leu Thr
 180 185 190
 Leu Leu Gly Phe Leu Ile Pro Leu Phe Val Met Cys Phe Phe Tyr Tyr
 195 200 205
 Lys Ile Ala Leu Phe Leu Lys Gln Arg Asn Arg Gln Val Ala Thr Ala
 210 215 220
 Leu Pro Leu Glu Lys Pro Leu Asn Leu Val Ile Met Ala Val Val Ile
 225 230 235 240
 Phe Ser Val Leu Phe Thr Pro Tyr His Val Met Arg Asn Val Arg Ile
 245 250 255
 Ala Ser Arg Leu Gly Ser Trp Lys Gln Tyr Gln Cys Thr Gln Val Val
 260 265 270
 Ile Asn Ser Phe Tyr Ile Val Thr Arg Pro Leu Ala Phe Leu Asn Ser
 275 280 285
 Val Ile Asn Pro Val Phe Tyr Phe Leu Leu Gly Asp His Phe Arg Asp
 290 295 300
 Met Leu Met Asn Gln Leu Arg His Asn Phe Lys Ser Leu Thr Ser Phe
 305 310 315 320
 Ser Arg Trp Ala His Glu Leu Leu Ser Phe Arg Glu Lys
 325 330
 <210> 39
 <211> 1296
 <212> DNA
 <213> Homo sapiens
 <400> 39
 atgcaggcgc ttaacattac cccggagcag ttctctcgcc tgctgcggga ccacaacctg 60
 acgcggggcgc agttcatcgcc tctgtaccgg ctgcgaccgc tcgtctacac cccagagctg 120
 ccgggacgcgc ccaagctggc cctcgtgctc accggcgtgc tcatcttcgc cctggcgctc 180
 tttggcaatg ctctggtgtt ctacgtggtg accccgcagca aggccatgcg caccgtcacc 240

Aren0054.ST25.txt

aacatctta	tctgctcctt	ggcgctcagt	gacctgctca	tcaccttctt	ctgcattccc	300
gtcaccatgc	tccagaacat	ttccgacaac	tggctggggg	gtgcttcat	ttgcaagatg	360
gtgccatttg	tccagtctac	cgcgttgtg	acagaaatgc	tcactatgac	ctgcattgct	420
gtggaaaggc	accagggact	tgtgcac	tttaaaatga	agtggcaata	caccaaccga	480
aggcattca	caatgctagg	tgtggctgg	ctgggtggcag	tcatcgtagg	atcacccatg	540
tggcacgtgc	aacaacttga	gatcaaata	gacttcctat	atgaaaagga	acacatctgc	600
tgcttagaag	agtggaccag	ccctgtgcac	cagaagatct	acaccac	catccttgc	660
atcccttcc	tcctgcctct	tatggtgatg	cttattctgt	acagtaaaat	tggtatgaa	720
ctttggataa	agaaaagagt	tggggatggt	tcagtgc	gaactattca	tggaaaagaa	780
atgtccaaaa	tagccaggaa	gaagaaacga	gctgtcatta	tgatggtgac	agtggggct	840
ctcttgctg	tgtgctggc	accattccat	gttgtccata	tgatgattga	atacagtaat	900
tttggaaaagg	aatatgatga	tgtcacaatc	aagatgattt	ttgctatcg	gcaaatttatt	960
ggattttcca	actccatctg	taatcccatt	gtctatgc	ttatgaatga	aaacttcaaa	1020
aaaaatgttt	tgtctgcagt	ttgttattgc	atagtaaata	aaaccttctc	tccagcacaa	1080
aggcatggaa	attcaggaat	tacaatgatg	cggaagaaag	caaagtttc	cctcagagag	1140
aatccagtgg	aggaaaccaa	aggagaagca	ttcagtgatg	gcaacattga	agtcaaattg	1200
tgtgaacaga	cagaggagaa	gaaaaagctc	aaacgcac	ttgctctt	tagtctgaa	1260
ctggctgaga	attctcc	ttt	agacagtgg	cattaa		1296
<210>	40					
<211>	431					
<212>	PRT					
<213>	Homo sapiens					
<400>	40					
Met Gln Ala Leu Asn Ile Thr Pro Glu Gln Phe Ser Arg Leu Leu Arg						
1	5	10		15		
Asp His Asn Leu Thr Arg Glu Gln Phe Ile Ala Leu Tyr Arg Leu Arg						
20	25		30			
Pro Leu Val Tyr Thr Pro Glu Leu Pro Gly Arg Ala Lys Leu Ala Leu						
35	40	45				
Val Leu Thr Gly Val Leu Ile Phe Ala Leu Ala Leu Phe Gly Asn Ala						
50	55	60				
Leu Val Phe Tyr Val Val Thr Arg Ser Lys Ala Met Arg Thr Val Thr						
65	70	75	80			
Asn Ile Phe Ile Cys Ser Leu Ala Leu Ser Asp Leu Leu Ile Thr Phe						
85	90	95				
Phe Cys Ile Pro Val Thr Met Leu Gln Asn Ile Ser Asp Asn Trp Leu						
100	105	110				

Aren0054.ST25.txt

Gly Gly Ala Phe Ile Cys Lys Met Val Pro Phe Val Gln Ser Thr Ala
115 120 125

Val Val Thr Glu Met Leu Thr Met Thr Cys Ile Ala Val Glu Arg His
130 135 140

Gln Gly Leu Val His Pro Phe Lys Met Lys Trp Gln Tyr Thr Asn Arg
145 150 155 160

Arg Ala Phe Thr Met Leu Gly Val Val Trp Leu Val Ala Val Ile Val
165 170 175

Gly Ser Pro Met Trp His Val Gln Gln Leu Glu Ile Lys Tyr Asp Phe
180 185 190

Leu Tyr Glu Lys Glu His Ile Cys Cys Leu Glu Glu Trp Thr Ser Pro
195 200 205

Val His Gln Lys Ile Tyr Thr Phe Ile Leu Val Ile Leu Phe Leu
210 215 220

Leu Pro Leu Met Val Met Leu Ile Leu Tyr Ser Lys Ile Gly Tyr Glu
225 230 235 240

Leu Trp Ile Lys Lys Arg Val Gly Asp Gly Ser Val Leu Arg Thr Ile
245 250 255

His Gly Lys Glu Met Ser Lys Ile Ala Arg Lys Lys Arg Ala Val
260 265 270

Ile Met Met Val Thr Val Val Ala Leu Phe Ala Val Cys Trp Ala Pro
275 280 285

Phe His Val Val His Met Met Ile Glu Tyr Ser Asn Phe Glu Lys Glu
290 295 300

Tyr Asp Asp Val Thr Ile Lys Met Ile Phe Ala Ile Val Gln Ile Ile
305 310 315 320

Gly Phe Ser Asn Ser Ile Cys Asn Pro Ile Val Tyr Ala Phe Met Asn
325 330 335

Glu Asn Phe Lys Lys Asn Val Leu Ser Ala Val Cys Tyr Cys Ile Val
340 345 350

Asn Lys Thr Phe Ser Pro Ala Gln Arg His Gly Asn Ser Gly Ile Thr
355 360 365

Met Met Arg Lys Lys Ala Lys Phe Ser Leu Arg Glu Asn Pro Val Glu
370 375 380

Glu Thr Lys Gly Glu Ala Phe Ser Asp Gly Asn Ile Glu Val Lys Leu
385 390 395 400

Cys Glu Gln Thr Glu Glu Lys Lys Leu Lys Arg His Leu Ala Leu
405 410 415

Phe Arg Ser Glu Leu Ala Glu Asn Ser Pro Leu Asp Ser Gly His
420 425 430

<210> 41
<211> 24
<212> DNA
<213> Artificial

Aren0054.ST25.txt

<220>
<223> Novel Sequence

<400> 41
ctgtgtacag cagttcgca agtg 24

<210> 42
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 42
gagtgccagg cagagcagg agac 24

<210> 43
<211> 31
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 43
cccgaattcc tgcttgctcc cagcttggcc c 31

<210> 44
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 44
tgtggatcct gctgtcaaag gtcccatattcc gg 32

<210> 45
<211> 20
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 45
tcacaatgct aggtgtggtc 20

<210> 46
<211> 22
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 46
tgcatacgaca atgggattac ag 22

Aren0054.ST25.txt

<210> 47
<211> 511
<212> DNA
<213> Homo sapiens

<400> 47
tcacaatgct aggtgtggc tggctgggt cagtcatcg aggatcaccc atgtggcacg 60
tgcaacaact tgagatcaaa tatgacttcc tatatgaaaa ggaacacatc tgctgcttag 120
aagagtggac cagccctgtg caccagaaga tctacaccac cttcatcctt gtcattct 180
tcctcctgcc tcctatggtg atgcttattc tgtacgtaaa attggttatg aactttggat 240
aaagaaaaaga gttggggatg gttcagtgc tcgaactatt catggaaaag aaatgtccaa 300
aatagccagg aagaagaaac gagctgtcat tatgatggtg acagtggtgg ctctcttgc 360
tgtgtgctgg gcaccattcc atgttgcata tatgatgatt gaatacagta attttgaaaa 420
ggaatatgtatgat gatgtcacaa tcaagatgtat ttttgcatac gtgcaaatta ttggattttc 480
caactccatc tgtaatcccc ttgtctatgc a 511

<210> 48
<211> 21
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 48
ctgcttagaa gagtggacca g 21

<210> 49
<211> 22
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 49
ctgtgcacca gaagatctac ac 22

<210> 50
<211> 21
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 50
caaggatgaa ggtgggttag a 21

<210> 51
<211> 23

Aren0054.ST25.txt

<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 51
gtgttagatct tctggtgac agg 23

<210> 52
<211> 21
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 52
gcaatgcagg tcatagtgag c 21

<210> 53
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 53
tggagcatgg tgacggaaat gcagaag 27

<210> 54
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 54
gtgatgagca ggtactgag cgccaag 27

<210> 55
<211> 23
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 55
gcaatgcagg cgcttaacat tac 23

<210> 56
<211> 22
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

Aren0054.ST25.txt

<400> 56
ttgggttaca atctgaaggg ca 22

<210> 57
<211> 23
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 57
actccgtgtc cagcaggact ctg 23

<210> 58
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 58
tgcgtgttcc tggaccctca cgtg 24

<210> 59
<211> 29
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 59
caggccttgg attttaatgt cagggatgg 29

<210> 60
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 60
ggagagttagt ctctgaaaga attcagg 27

<210> 61
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 61
tgatgtgatg ccagatacta atagcac 27

Aren0054.ST25.txt

<210>	62	
<211>	27	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Novel Sequence	
<400>	62	
cctgattcat ttaggtgaga ttgagac		27
<210>	63	
<211>	26	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Novel Sequence	
<400>	63	
cccaagcttc cccaggtgtat tttgat		26
<210>	64	
<211>	26	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Novel Sequence	
<400>	64	
gttggatcca cataatgcata tttctc		26
<210>	65	
<211>	1080	
<212>	DNA	
<213>	Homo sapiens	
<400>	65	
atgattctca actcttctac tgaagatgg attaaaagaa tccaaatgtat ttgtccaaa		60
gcttggaaaggc ataattacat atttgtcatg attcctactt tatacagtat catctttgtg		120
gttggaaatat ttggaaacag cttgggtgt atagtcattt acttttatat gaagctgtaa		180
actgtggcca gtgttttct tttgaattta gcactggctg acttatgttt tttactgact		240
ttgccactat gggctgtcta cacagctatg gaataccgct ggcccttgg caattaccta		300
tgtaagattt cttcagccag cgtcagttt aacctgtacg ctgtgtgtt tctactcacg		360
tgtctcagca ttgatcgata cctggctatt gttcacccaa tgaagtccc ctttcgacgc		420
acaatgctt tagccaaatg cacctgcata atcatttggc tgctggcagg cttggccagt		480
ttgccagcta taatccatcg aaatgtattt ttcattgaga acaccaatat tacagttgt		540
gctttccatt atgagtcccc aaattcaacc cttccgatag ggctgggcct gaccaaaaat		600
ataactgggtt tcctgtttcc ttttctgatc attcttacaa gttatactct tatttggaa		660
gccctaaaga aggcttatga aattcagaag aacaaaccaa gaaatgtatgatgat tatttttaag		720

Aren0054.ST25.txt

ataattatgg caattgtgct tttcttttc tttcctgga ttccccacca aatattcact	780
tttctggatg tattgattca actaggcatc atacgtgact gtagaattgc agatatttg	840
gacacggcca tgcctatcac catttgtata gcttatttta acaattgcct gaatcccttt	900
tttatggct ttctgggaa aaaattaaa agatatttc tccagcttct aaaatatatt	960
cccccaaaag ccaaattcca ctcaaaccct tcaacaaaaa tgagcacgct ttcctaccgc	1020
ccctcagata atgtaagctc atccaccaag aagcctgcac catgtttga ggttgagtga	1080

<210> 66
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 66

Met Ile Leu Asn Ser Ser Thr Glu Asp Gly Ile Lys Arg Ile Gln Asp
 1 5 10 15

Asp Cys Pro Lys Ala Gly Arg His Asn Tyr Ile Phe Val Met Ile Pro
 20 25 30

Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu
 35 40 45

Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser
 50 55 60

Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr
 65 70 75 80

Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe
 85 90 95

Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Asn Leu
 100 105 110

Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu
 115 120 125

Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val
 130 135 140

Ala Lys Val Thr Cys Ile Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser
 145 150 155 160

Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn
 165 170 175

Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro
 180 185 190

Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe
 195 200 205

Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys
 210 215 220

Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Phe Lys
 225 230 235 240

Aren0054.ST25.txt

Ile Ile Met Ala Ile Val Leu Phe Phe Phe Ser Trp Ile Pro His
245 250 255

Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile Arg
260 265 270

Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile
275 280 285

Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe
290 295 300

Leu Gly Lys Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr Ile
305 310 315 320

Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser Thr
325 330 335

Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys Pro
340 345 350

Ala Pro Cys Phe Glu Val Glu
355

<210> 67

<211> 27

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 67

accatggca gccccctggaa cggcagc

27

<210> 68

<211> 39

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 68

agaaccacca ccagcaggac gcggacggtc tgccgggtgg

39

<210> 69

<211> 39

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 69

gtccgcgtcc tgctgggtggt ggttctggca ttataatt

39

<210> 70

<211> 33

<212> DNA

<213> Artificial

Aren0054.ST25.txt

<220>
<223> Novel Sequence

<400> 70
cctggatcct tatcccatcg tcttcacggtt agc 33

<210> 71
<211> 26
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 71
cttggattct cctgccagca tggta 26

<210> 72
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 72
gcaggatcct atattgcgtg ctctgtcccc 30

<210> 73
<211> 999
<212> DNA
<213> Homo sapiens

<400> 73
atggtaact ccacccaccc tggtatgcac acttctctgc acctctggaa ccgcagcagt 60
tacagactgc acagcaatgc cagttagtcc ctggaaaag gctactctga tggagggtgc 120
tacgagcaac ttttgtctc tcctgaggtg tttgtgactc tgggtgtcat cagcttgg 180
gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acccatgtac 240
ttttcatct gcagcttggc tgtggctgat atgctggta gcgttcaaa tggatcagaa 300
accattatca tcaccctatt aaacagtaca gatacggatg cacagatcc cacagtgaat 360
attgataatg tcattgactc ggtgatctgt agtccttgc ttgcattccat ttgcagcctg 420
ctttcaattt cagtggacag gtactttact atcttctatg ctctccagta ccataacatt 480
atgacagtttta agcgggttgg gatcagcata agttgtatct gggcagcttgc cacggttca 540
ggcattttgt tcatcattta ctcagatagt agtgctgtca tcatctgcct catcaccatg 600
ttcttcacca tgctggctct catggcttct ctctatgtcc acatgttccat gatggccagg 660
cttcacatta agaggattgc tgcctcccc ggcactggtg ccatccgcca aggtgcatt 720
atgaaggag cgattacattt gaccatcctg attggcgatct ttgttgcgttgc ctggggccca 780
ttcttcctcc acttaatattt ctacatctct tgcctcaga atccatattt tgcgtgcattc 840

Aren0054.ST25.txt

atgtctcaact ttaacttgtat	tctcatactg atcatgtgtat	attcaatcat cgatccctcg	900
atttatgcac tccggagtca	agaactgagg aaaaacctca	aagagatcat ctgttgctat	960
ccccctggag gcctttgtga	cttgtctagc agatattaa		999

<210> 74
<211> 332
<212> PRT
<213> Homo sapiens

<400> 74

Met Val Asn Ser Thr His Arg Gly Met His Thr Ser Leu His Leu Trp			
1	5	10	15

Asn Arg Ser Ser Tyr Arg Leu His Ser Asn Ala Ser Glu Ser Leu Gly			
20	25	30	

Lys Gly Tyr Ser Asp Gly Gly Cys Tyr Glu Gln Leu Phe Val Ser Pro			
35	40	45	

Glu Val Phe Val Thr Leu Gly Val Ile Ser Leu Leu Glu Asn Ile Leu			
50	55	60	

Val Ile Val Ala Ile Ala Lys Asn Lys Asn Leu His Ser Pro Met Tyr			
65	70	75	80

Phe Phe Ile Cys Ser Leu Ala Val Ala Asp Met Leu Val Ser Val Ser			
85	90	95	

Asn Gly Ser Glu Thr Ile Ile Ile Thr Leu Leu Asn Ser Thr Asp Thr			
100	105	110	

Asp Ala Gln Ser Phe Thr Val Asn Ile Asp Asn Val Ile Asp Ser Val			
115	120	125	

Ile Cys Ser Ser Leu Leu Ala Ser Ile Cys Ser Leu Leu Ser Ile Ala			
130	135	140	

Val Asp Arg Tyr Phe Thr Ile Phe Tyr Ala Leu Gln Tyr His Asn Ile			
145	150	155	160

Met Thr Val Lys Arg Val Gly Ile Ser Ile Ser Cys Ile Trp Ala Ala			
165	170	175	

Cys Thr Val Ser Gly Ile Leu Phe Ile Ile Tyr Ser Asp Ser Ser Ala			
180	185	190	

Val Ile Ile Cys Leu Ile Thr Met Phe Phe Thr Met Leu Ala Leu Met			
195	200	205	

Ala Ser Leu Tyr Val His Met Phe Leu Met Ala Arg Leu His Ile Lys			
210	215	220	

Arg Ile Ala Val Leu Pro Gly Thr Gly Ala Ile Arg Gln Gly Ala Asn			
225	230	235	240

Met Lys Gly Ala Ile Thr Leu Thr Ile Leu Ile Gly Val Phe Val Val			
245	250	255	

Cys Trp Ala Pro Phe Phe Leu His Leu Ile Phe Tyr Ile Ser Cys Pro			
260	265	270	

Aren0054.ST25.txt

Gln Asn Pro Tyr Cys Val Cys Phe Met Ser His Phe Asn Leu Tyr Leu
 275 280 285

Ile Leu Ile Met Cys Asn Ser Ile Ile Asp Pro Leu Ile Tyr Ala Leu
 290 295 300

Arg Ser Gln Glu Leu Arg Lys Thr Phe Lys Glu Ile Ile Cys Cys Tyr
 305 310 315 320

Pro Leu Gly Gly Leu Cys Asp Leu Ser Ser Arg Tyr
 325 330

<210> 75
 <211> 32
 <212> DNA
 <213> Artificial

<220>
 <223> Novel Sequence

<400> 75
 ccgaagcttc gagctgagta aggcggcggg ct 32

<210> 76
 <211> 31
 <212> DNA
 <213> Artificial

<220>
 <223> Novel Sequence

<400> 76
 gtggaaattca tttgccctgc ctcaacccccc a 31

<210> 77
 <211> 1344
 <212> DNA
 <213> Homo sapiens

<400> 77
 atggagctgc taaagctgaa ccggagcgtg cagggAACCG gACCCGGGCC gGGGGCTTCC 60
 ctgtggcgcc cgggggcgcc ttcctcaac agcagcagtg tggcaacct cagctgcgag 120
 cccctctcgca ttgcggagc cggcacacga gaattggagc tggcatttag aatcaacttt 180
 tacgcagtga tttcctgat gagcgttgg acaaataatgc tcatacatcg tgcctggaa 240
 ctgagccgcc gcctgaggac tgtcaccaat gccttcctcc tctcaactggc agtcagcgac 300
 ctcctgctgg ctgtggcttg catgccttc accctcctgc ccaatctcat gggcacattc 360
 atcttggca ccgtcatctg caaggcggtt tcctaccta tgggggtgtc tgtgagtgtg 420
 tccacgctaa gcctcggtgc catcgactg gagcgatata ggcgcacatcg ccgaccactg 480
 caggcacgag tgtggcagac ggcgtccac gcccgtcg tgattgtac cacgtggctg 540
 ctgtccggac tactcatggt gccctacccc gtgtacactg tcgtgcaacc agtggggcct 600
 cgtgtgctgc agtgcgtgca tcgctggccc agtgcgcggg tccgcccagac ctggtccgta 660

Aren0054.ST25.txt

ctgctgcttc	tgctcttgtt	cttcatccca	ggtgtggta	tggcgtggc	ctacgggctt	720
atctctcgcg	agctctactt	agggcttcgc	tttgacggcg	acagtacag	cgacagccaa	780
agcagggtcc	gaaacccaagg	cgggctgcca	ggggctgttc	accagaacgg	gcgttgcgg	840
cctgagactg	gcgcgggtgg	caaagacagc	gatggctgt	acgtcaact	tccacgttcc	900
cggcctgccc	tggagctgac	ggcgctgacg	gctcctggc	cgggatccgg	ctcccgcccc	960
acccaggcca	agctgctggc	taagaagcgc	gtgggtcgaa	tgttgcgtt	gatcggttg	1020
cttttttttc	tgtgttggtt	gccagtttat	agtgc当地aca	cgtggcgcgc	ctttgatggc	1080
ccgggtgcac	accgagcaact	ctcgggtgct	cctatctcct	tcattcactt	gctgagctac	1140
gcctcggcct	gtgtcaaccc	cctggctctac	tgcttcatgc	accgtcgctt	tcgcccaggcc	1200
tgcctggaaa	cttgcgctcg	ctgctgcccc	cggcctccac	gagctcgccc	cagggtctt	1260
cccgatgagg	accctcccac	tccctccatt	gcttcgctgt	ccaggcttag	ctacaccacc	1320
atcagcacac	tggccctgg	ctga				1344

PROTEIN SEQUENCE FINDER

<210> 78
 <211> 447
 <212> PRT
 <213> Homo sapiens

<400> 78

Met Glu Leu Leu Lys Leu Asn Arg Ser Val Gln Gly Thr Gly Pro Gly
 1 5 10 15

Pro Gly Ala Ser Leu Cys Arg Pro Gly Ala Pro Leu Leu Asn Ser Ser
 20 25 30

Ser Val Gly Asn Leu Ser Cys Glu Pro Pro Arg Ile Arg Gly Ala Gly
 35 40 45

Thr Arg Glu Leu Glu Leu Ala Ile Arg Ile Thr Leu Tyr Ala Val Ile
 50 55 60

Phe Leu Met Ser Val Gly Gly Asn Met Leu Ile Ile Val Val Leu Gly
 65 70 75 80

Leu Ser Arg Arg Leu Arg Thr Val Thr Asn Ala Phe Leu Leu Ser Leu
 85 90 95

Ala Val Ser Asp Leu Leu Ala Val Ala Cys Met Pro Phe Thr Leu
 100 105 110

Leu Pro Asn Leu Met Gly Thr Phe Ile Phe Gly Thr Val Ile Cys Lys
 115 120 125

Ala Val Ser Tyr Leu Met Gly Val Ser Val Ser Val Ser Thr Leu Ser
 130 135 140

Leu Val Ala Ile Ala Leu Glu Arg Tyr Ser Ala Ile Cys Arg Pro Leu
 145 150 155 160

Gln Ala Arg Val Trp Gln Thr Arg Ser His Ala Ala Arg Val Ile Val
 165 170 175

Aren0054.ST25.txt

Ala Thr Trp Leu Leu Ser Gly Leu Leu Met Val Pro Tyr Pro Val Tyr
180 185 190

Thr Val Val Gln Pro Val Gly Pro Arg Val Leu Gln Cys Val His Arg
195 200 205

Trp Pro Ser Ala Arg Val Arg Gln Thr Trp Ser Val Leu Leu Leu Leu
210 215 220

Leu Leu Phe Phe Ile Pro Gly Val Val Met Ala Val Ala Tyr Gly Leu
225 230 235 240

Ile Ser Arg Glu Leu Tyr Leu Gly Leu Arg Phe Asp Gly Asp Ser Asp
245 250 255

Ser Asp Ser Gln Ser Arg Val Arg Asn Gln Gly Gly Leu Pro Gly Ala
260 265 270

Val His Gln Asn Gly Arg Cys Arg Pro Glu Thr Gly Ala Val Gly Lys
275 280 285

Asp Ser Asp Gly Cys Tyr Val Gln Leu Pro Arg Ser Arg Pro Ala Leu
290 295 300

Glu Leu Thr Ala Leu Thr Ala Pro Gly Pro Gly Ser Gly Ser Arg Pro
305 310 315 320

Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val Val Arg Met Leu Leu
325 330 335

Val Ile Val Val Leu Phe Phe Leu Cys Trp Leu Pro Val Tyr Ser Ala
340 345 350

Asn Thr Trp Arg Ala Phe Asp Gly Pro Gly Ala His Arg Ala Leu Ser
355 360 365

Val Ala Pro Ile Ser Phe Ile His Leu Leu Ser Tyr Ala Ser Ala Cys
370 375 380

Val Asn Pro Leu Val Tyr Cys Phe Met His Arg Arg Phe Arg Gln Ala
385 390 395 400

Cys Leu Glu Thr Cys Ala Arg Cys Cys Pro Arg Pro Pro Arg Ala Arg
405 410 415

Pro Arg Ala Leu Pro Asp Glu Asp Pro Pro Thr Pro Ser Ile Ala Ser
420 425 430

Leu Ser Arg Leu Ser Tyr Thr Thr Ile Ser Thr Leu Gly Pro Gly
435 440 445

<210> 79
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 79
tgcaagctta aaaaggaaaa aatgaacagc

30

<210> 80
<211> 30

Aren0054.ST25.txt

<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 80
taaggatccc ttcccttcaa aacatccttg

30

<210> 81
<211> 1014
<212> DNA
<213> Homo sapiens

<400> 81
atgaacagca catgtattga agaacagcat gacctggatc actatttggtt tccccattttt 60
tacatctttt tgattatagt cagcattcca gccaaatattt gatctctgtg tgtgtctttc 120
ctgcaaccca agaaggaaag tgaacttagga atttacactt tcagtttgc actatcgat 180
ttactctatg cattaactct cccttatgg attgattata ctggaaataa agacaactgg 240

actttcttc ctgccttggt caaaggagt gctttctca tgtacatgaa gttttacagc 300
agcacagcat tcctcacctg cattgccgtt gatcggtatt tggctgttgtt ctaccctttt 360
aagtttttt tcctaaggac aagaagaatt gcactcatgg tcagcctgtc catctggata 420
ttggaaacca tcttcaatgc tgtcatgttggt tggaaagatg aaacagttgt tgaatattgc 480
gatgccgaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa 540
atcaacctca acttggtcag gacgtgtaca ggctatgcaa taccttttgtt caccatcctg 600
atctgttaacc ggaaagtcta ccaagctgtg cgccacaata aagccacgga aaacaaggaa 660
aagaagagaa tcataaaact acttggtcagc atcacagtta cttttgtctt atgctttact 720
cccttcatg tggatgttgct gattcgctgc atttttagagc atgctgtgaa cttcgaagac 780
cacagcaatt ctgggaagcg aacttacaca atgtatagaa tcacgggtgc attaacaagt 840
ttaaatttgtt tggctgtatcc aattctgtac tggatgttta ccgaaacagg aagatatgtat 900
atgttggaaata tattaaaattt ctgcactggg aggtgtataa catcacaaag acaaagaaaa 960
cgcatactt ctgtgtctac aaaagataact atgaaattttag aggtccttga gtag 1014

<210> 82
<211> 337
<212> PRT
<213> Homo sapiens

<400> 82

Met Asn Ser Thr Cys Ile Glu Glu Gln His Asp Leu Asp His Tyr Leu
1 5 10 15

Phe Pro Ile Val Tyr Ile Phe Val Ile Ile Val Ser Ile Pro Ala Asn
20 25 30

Ile Gly Ser Leu Cys Val Ser Phe Leu Gln Pro Lys Lys Glu Ser Glu

Aren0054.ST25.txt

35

40

45

Leu Gly Ile Tyr Leu Phe Ser Leu Ser Leu Ser Asp Leu Leu Tyr Ala
 50 55 60

Leu Thr Leu Pro Leu Trp Ile Asp Tyr Thr Trp Asn Lys Asp Asn Trp
 65 70 75 80

Thr Phe Ser Pro Ala Leu Cys Lys Gly Ser Ala Phe Leu Met Tyr Met
 85 90 95

Lys Phe Tyr Ser Ser Thr Ala Phe Leu Thr Cys Ile Ala Val Asp Arg
 100 105 110

Tyr Leu Ala Val Val Tyr Pro Leu Lys Phe Phe Leu Arg Thr Arg
 115 120 125

Arg Ile Ala Leu Met Val Ser Leu Ser Ile Trp Ile Leu Glu Thr Ile
 130 135 140

Phe Asn Ala Val Met Leu Trp Glu Asp Glu Thr Val Val Glu Tyr Cys
 145 150 155 160

Asp Ala Glu Lys Ser Asn Phe Thr Leu Cys Tyr Asp Lys Tyr Pro Leu
 165 170 175

Glu Lys Trp Gln Ile Asn Leu Asn Leu Phe Arg Thr Cys Thr Gly Tyr
 180 185 190

Ala Ile Pro Leu Val Thr Ile Leu Ile Cys Asn Arg Lys Val Tyr Gln
 195 200 205

Ala Val Arg His Asn Lys Ala Thr Glu Asn Lys Glu Lys Lys Arg Ile
 210 215 220

Ile Lys Leu Leu Val Ser Ile Thr Val Thr Phe Val Leu Cys Phe Thr
 225 230 235 240

Pro Phe His Val Met Leu Leu Ile Arg Cys Ile Leu Glu His Ala Val
 245 250 255

Asn Phe Glu Asp His Ser Asn Ser Gly Lys Arg Thr Tyr Thr Met Tyr
 260 265 270

Arg Ile Thr Val Ala Leu Thr Ser Leu Asn Cys Val Ala Asp Pro Ile
 275 280 285

Leu Tyr Cys Phe Val Thr Glu Thr Gly Arg Tyr Asp Met Trp Asn Ile
 290 295 300

Leu Lys Phe Cys Thr Gly Arg Cys Asn Thr Ser Gln Arg Gln Arg Lys
 305 310 315 320

Arg Ile Leu Ser Val Ser Thr Lys Asp Thr Met Glu Leu Glu Val Leu
 325 330 335

Glu

<210> 83

<211> 40

<212> DNA

<213> Artificial

<220>

Aren0054.ST25.txt

<223> Novel Sequence

<400> 83

caggaagaag aaacgagctg tcattatgtat ggtgacagt

40

<210> 84

<211> 40

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 84

cactgtcacc atcataatga cagtcgttt ctcttcctg

40

<210> 85

<211> 30

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 85

ggccaccggc agaccaaacg cgtcctgctg

30

<210> 86

<211> 31

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 86

ctccttcggt cctccttatcg ttgtcagaag t

31

<210> 87

<211> 37

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 87

ggaaaagaag agaatcaaaaa aactacttgt cagcatc

37

<210> 88

<211> 31

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 88

ctccttcggt cctccttatcg ttgtcagaag t

31

Aren0054.ST25.txt

<210> 89
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 89
atgattctca actcttctac tgaagatgg attaaaagaa tccaagatga ttgtcccaa 60
gctggaaggc ataattacat atttgtcatg attcctactt tatacagtat catcttg 120
gtggaaatat ttggaaacag cttgggtgt atagtcattt acttttatat gaagctgaag 180
actgtggcca gtgttttct tttgaattta gcactggctg actttagtgc ttactgact 240
ttgccactat gggctgtcta cacagctatg gaataccgct ggcccttgg caattaccta 300
tgtaagattt cttcagccag cgtcagttt aacctgtacg ctatgtgtt tctactc 360
tgtctcagca ttgatcgata cctggctatt gttcacccaa tgaagtccc cttcgacgc 420
acaatgctt tagccaaagt cacctgcac atcatttgc tgctggcagg ctggccagt 480
ttgcagcta taatccatcg aaatgtattt ttcattgaga acaccaatatacagttgt 540
gcttccatt atgagtccca aaattcaacc cttccgatag ggctggcct gaccaaaaat 600
atactgggtt tcctgtttcc tttctgatc attcttacaa gttatactct tatttggaa 660
gccctaaaga aggcttatga aattcagaag aacaaaccaa gaaatgtga tattaaaaag 720
ataattatgg caattgtgct tttcttttc tttcctgga ttccccacca aatattcact 780
tttctggatg tattgattca actaggcatc atacgtgact gttagattgc agatattgt 840
gacacggcca tgcctatcac cattgtata gcttatttta acaattgcct gaatccctt 900
tttatggct ttctgggaa aaaattaaa agatatttc tccagcttct aaaatataatt 960
cccccaaag ccaaatccca ctcaaaccct tcaacaaaaa tgagcacgt ttcctaccgc 1020
ccctcagata atgtaagctc atccaccaag aagcctgcac catgtttga ggttgagtga 1080

<210> 90
<211> 359
<212> PRT
<213> Homo sapiens

<400> 90

Met Ile Leu Asn Ser Ser Thr Glu Asp Gly Ile Lys Arg Ile Gln Asp
1 5 10 15

Asp Cys Pro Lys Ala Gly Arg His Asn Tyr Ile Phe Val Met Ile Pro
20 25 30

Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu
35 40 45

Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser
50 55 60

Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr
65 70 75 80

Aren0054.ST25.txt

Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe
85 90 95

Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Asn Leu
100 105 110

Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu
115 120 125

Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val
130 135 140

Ala Lys Val Thr Cys Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser
145 150 155 160

Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn
165 170 175

Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro
180 185 190

Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe
195 200 205

Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys
210 215 220

Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Lys Lys
225 230 235 240

Ile Ile Met Ala Ile Val Leu Phe Phe Phe Ser Trp Ile Pro His
245 250 255

Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile Arg
260 265 270

Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile
275 280 285

Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe
290 295 300

Leu Gly Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr Ile
305 310 315 320

Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser Thr
325 330 335

Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys Pro
340 345 350

Ala Pro Cys Phe Glu Val Glu
355

<210> 91

<211> 35

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 91

ccaagaaaatg atgatattaa aaagataatt atggc

35

Aren0054.ST25.txt

<210> 92
<211> 31
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 92
ctccttcgtt ctcctatcg ttgtcagaag t 31

<210> 93
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 93
atgattctca actcttctac tgaagatgg attaaaagaa tccaagatga ttgtccaaa 60
gctgaaaggc ataattacat atttgtcatg attcctactt tatacagtat catctttgt 120
gtggaaatat ttggaaacag ctgggtggtg atagtcattt acttttatat gaagctgaag 180
actgtggcca gtgttttct tttgaattta gcactggctg acttatgc ttactgact 240
ttgccactat gggctgtcta cacagctatg gaataccgct ggccctttgg caattaccta 300
tgtaagattt cttcagccag cgtagttc gccctgtacg ctatgtgtt tctactcacg 360
tgttcagca ttgatcgata cctggctatt gttcacccaa tgaagtccc ctttcgacgc 420
acaatgctt tagccaaagt cacctgcattt atcatttggc tgctggcagg cttggccagt 480
ttgccagcta taatccatcg aaatgtattt ttcattgaga acaccaatat tacagttgt 540
gcttccattt atgagtcaca aaattcaacc cttccgatag ggctgggcct gaccaaaaat 600
atactgggtt tcctgtttcc tttctgatc attcttacaa gttatactct tatttggaa 660
gccctaaaga aggcttatga aattcagaag aacaaaccaa gaaatgatga tatttttaag 720
ataattatgg caatttgctt tttcttttc tttcctgga ttccccacca aatattcact 780
tttctggatg tattgattca actaggcatc atacgtgact gtatgtgc agatattgt 840
gacacggcca tgcctatcac catttgata gcttattta acaattgcct gaatccctt 900
tttatggct ttctgggaa aaaatttaaa agatatttc tccagcttct aaaatatatt 960
cccccaaaag ccaaatttcca ctcaaacctt tcaacaaaaa tgagcacgct ttcctaccgc 1020
ccctcagata atgtaagctc atccaccaag aagcctgcac catgtttga ggttgagtga 1080

<210> 94
<211> 359
<212> PRT
<213> Homo sapiens

<400> 94

Met Ile Leu Asn Ser Ser Thr Glu Asp Gly Ile Lys Arg Ile Gln Asp

Aren0054.ST25.txt

1	5	10	15
Asp Cys Pro Lys Ala Gly Arg His Asn Tyr Ile Phe Val Met Ile Pro			
20	25	30	
Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu			
35	40	45	
Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser			
50	55	60	
Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr			
65	70	75	80
Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe			
85	90	95	
Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Ala Leu			
100	105	110	
Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu			
115	120	125	
Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val			
130	135	140	
Ala Lys Val Thr Cys Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser			
145	150	155	160
Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn			
165	170	175	
Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro			
180	185	190	
Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe			
195	200	205	
Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys			
210	215	220	
Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Phe Lys			
225	230	235	240
Ile Ile Met Ala Ile Val Leu Phe Phe Phe Ser Trp Ile Pro His			
245	250	255	
Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile Arg			
260	265	270	
Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile			
275	280	285	
Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe			
290	295	300	
Leu Gly Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr Ile			
305	310	315	320
Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser Thr			
325	330	335	
Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys Pro			
340	345	350	

Aren0054.ST25.txt

Ala Pro Cys Phe Glu Val Glu
355

<210> 95
<211> 26
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 95
cccaagcttc cccaggtgta tttgat

26

<210> 96
<211> 29
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 96
cctgcaggcg aaactgactc tggctgaag

29

<210> 97
<211> 42
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 97
ctgtacgcta gtgtgtttct actcacgtgt ctcagcattt at

42

<210> 98
<211> 26
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 98
gttggatcca cataatgcat tttctc

26

<210> 99
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 99
atgattctca actcttctac tgaagatgg attaaaagaa tccaagatga ttgtcccaa
60
gctggaaggc ataattacat atttgtcatg attcctactt tatacagtat catctttgt
120
gtggaaatat ttggaaacag cttgggtgg atagtcattt acttttatat gaagctgaag
180
actgtggcca gtgttttct tttgaattta gcactggctg acttatgctt tttactgact
240

Aren0054.ST25.txt

ttgccactat	gggctgtcta	cacagctatg	gaataccgct	ggcccttgg	caattaccta	300
tgtaagattg	cttcagccag	cgtcagttc	aacctgtacg	ctagtgttt	tctactcacg	360
tgtctcagca	ttgatcgata	cctggctatt	gttcacccaa	tgaagtcccc	ccttcgacgc	420
acaatgcttg	tagccaaagt	cacctgcac	atcatttggc	tgctggcagg	cttggccagt	480
ttgccagcta	taatccatcg	aaatgtat	ttcattgaga	acaccaat	tacagttgt	540
gctttccatt	atgagtcccc	aaattcaacc	cttccgatag	ggctgggcct	gacaaaaaat	600
atactgggtt	tcctgtttcc	tttctgatc	attcttacaa	gttattttgg	aattcgaaaa	660
cacttactga	agacgaatag	ctatggaaag	aacaggataa	cccgtgacca	agttaagaag	720
ataattatgg	caattgtgct	tttcttttc	tttcctgga	ttccccacca	aatattcact	780
tttctggatg	tattgattca	actaggcatc	atacgtgact	gtagaattgc	agatattgtg	840
gacacggcca	tgcctatcac	catttgtata	gcttatttta	acaattgcct	gaatcctctt	900
tttatggct	ttctggggaa	aaaatttaaa	agatatttc	tccagcttct	aaaatatatt	960
cccccaaaag	ccaaatcccc	ctcaaacc	tcaacaaaaa	tgagcacgct	ttcctaccgc	1020
ccctcagata	atgtaagctc	atccaccaag	aagcctgcac	catgtttga	ggttgagtga	1080
 ----- ----- ----- ----- ----- ----- -----						
<210>	100					
<211>	359					
<212>	PRT					
<213>	Homo sapiens					
 ----- ----- ----- ----- ----- ----- -----						
<400>	100					
Met Ile Leu Asn Ser Ser Thr Glu Asp Gly Ile Lys Arg Ile Gln Asp						
1	5	10	15			
Asp Cys Pro Lys Ala Gly Arg His Asn Tyr Ile Phe Val Met Ile Pro						
20	25	30				
Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu						
35	40	45				
Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser						
50	55	60				
Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr						
65	70	75	80			
Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe						
85	90	95				
Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Asn Leu						
100	105	110				
Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu						
115	120	125				
Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val						
130	135	140				
Ala Lys Val Thr Cys Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser						
145	150	155	160			

Aren0054.ST25.txt

Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn
165 170 175

Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro
180 185 190

Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe
195 200 205

Leu Ile Ile Leu Thr Ser Tyr Phe Gly Ile Arg Lys His Leu Leu Lys
210 215 220

Thr Asn Ser Tyr Gly Lys Asn Arg Ile Thr Arg Asp Gln Val Lys Lys
225 230 235 240

Ile Ile Met Ala Ile Val Leu Phe Phe Ser Trp Ile Pro His
245 250 255

Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile Arg
260 265 270

Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile
275 280 285

Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe
290 295 300

Leu Gly Lys Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr Ile
305 310 315 320

Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser Thr
325 330 335

Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys Pro
340 345 350

Ala Pro Cys Phe Glu Val Glu
355

<210> 101

<211> 37

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 101

tccgaattcc aaaataactt gtaagaatga tcagaaaa

37

<210> 102

<211> 33

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 102

agatcttaag aagataatta tggcaattgt gct

33

<210> 103

Aren0054.ST25.txt

<211> 62
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 103
aattcgaaaa cacttactga agacgaatag ctatggaaag aacaggataa cccgtgacca 60
ag 62

<210> 104
<211> 62
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 104
ttaacttggt cacgggttat cctgttcttc ccatacgat tcgtcttcag taagtgttt 60
cg 62

<210> 105
<211> 1083
<212> DNA
<213> Homo sapiens

<400> 105
atgattctca actcttctac tgaagatgg attaaaagaa tccaagatga ttgtcccaa 60
gctgaaaggc ataattacat atttgtcatg attcctactt tatacagtat catcttgc 120
gtggaaatat ttggaaacag cttgggttg atagtcattt acttttatat gaagctgaag 180
actgtggcca gtgttttct tttgaattta gcactggctg actttagctt tttactgact 240
ttgccactat gggctgtcta cacagctatg gaataccgct ggcccttgg caattaccta 300
tgtaagattt cttcagccag cgtcagttc aacctgtacg ctatgtgtt tctactcacg 360
tgtctcagca ttgatcgata cctggctatt gttcacccaa tgaagtcccc cttcgacgc 420
acaatgctt tagccaaagt cacctgcattc atcatttgc tgctggcagg cttggccagt 480
ttgccagcta taatccatcg aaatgtattt ttcattgaga acaccaatat tacagttgt 540
gctttccatt atgagtcccc aaattcaacc cttccgatag ggctgggcct gacaaaaat 600
atactgggtt tcctgtttcc ttttctgatc attcttacaa gttatactct tatttggaa 660
gccctaaaga aggcttatga aattcagaag aacaaaccaa gaaatgtga tatttttaag 720
ataattatgg cagcaattgt gctttcttt ttctttctt ggattcccc ccaaataattc 780
acttttctgg atgtattgat tcaactaggc atcatacgatg actgtagaat tgcagatatt 840
gtggacacgg ccatgcctat caccattgt atagcttatt ttaacaattt cctgaatcct 900
ctttttatg gctttctgg gaaaaaattt aaaagatatt ttctccagct tctaaaatat 960

Aren0054.ST25.txt

attcccccaa aagccaaatc ccactcaaac cttcaacaa aaatgagcac gcttcctac 1020
 cgccccttag ataatgttaag ctcatccacc aagaagcctg caccatgtt tgagggttag 1080
 tga 1083

<210> 106
 <211> 360
 <212> PRT
 <213> Homo sapiens

<400> 106

Met Ile Leu Asn Ser Ser Thr Glu Asp Gly Ile Lys Arg Ile Gln Asp
 1 5 10 15

Asp Cys Pro Lys Ala Gly Arg His Asn Tyr Ile Phe Val Met Ile Pro
 20 25 30

Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu
 35 40 45

Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser
 50 55 60

Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr
 65 70 75 80

Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe
 85 90 95

Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Asn Leu
 100 105 110

Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu
 115 120 125

Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val
 130 135 140

Ala Lys Val Thr Cys Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser
 145 150 155 160

Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn
 165 170 175

Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro
 180 185 190

Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe
 195 200 205

Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys
 210 215 220

Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Phe Lys
 225 230 235 240

Ile Ile Met Ala Ala Ile Val Leu Phe Phe Phe Ser Trp Ile Pro
 245 250 255

His Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile
 260 265 270

Aren0054.ST25.txt

Arg Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr
275 280 285

Ile Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly
290 295 300

Phe Leu Gly Lys Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr
305 310 315 320

Ile Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser
325 330 335

Thr Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys
340 345 350

Pro Ala Pro Cys Phe Glu Val Glu
355 360

<210> 107

<211> 26

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 107

cccaagcttc cccaggtgta tttgat

26

<210> 108

<211> 38

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 108

aagcacaatt gctgcataat tatcttaaaa atatcatc

38

<210> 109

<211> 39

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 109

aagataatta tggcagcaat tgtgctttc ttttcttt

39

<210> 110

<211> 26

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 110

gttggatcca cataatgcat tttctc

26

Aren0054.ST25.txt

<210> 111
<211> 1344
<212> DNA
<213> Homo sapiens

<400> 111
atggagctgc taaagctgaa ccggagcgtg cagggAACCG gacCCGGGCC gggggCTTCC 60
ctgtGCCGCC CGGGGGCGCC tctcctcaac agcAGCAGTG tgggcaACCT cagCTGCAG 120
ccccCTCGCA ttCGCGGAGC CGGGACACGA gaATTGGAGC tggccATTAG aATCACTCTT 180
tacgcAGTGA tcttcctgat gagcgttgga ggAAATATGC tcatcatcGT ggtccTGGGA 240
ctgagCCGCC GCCTGAGGAC tgcACCAAT gccttCCtCC tctcaCTGGC agTCAGCGAC 300
ctccTGTGG CTGTGGCTTG catGCCCTC ACCCTCTGC ccaATCTCAT gggCACATTC 360
atcttggca ccgtcatctg caaggcggtt tcctaccta tgggggtgtc tgtgagtgt 420
tccacgctaa gcctcgtggc catcgcactg gagcgtata gcGCCATCTG ccgaccACTG 480
caggcacGAG TGTGGCAGAC gcgcTCCCAC gcggctcgcg tgattgtAGC cacgtggctG 540
ctgtccggac tactcatggt gcctacccc gtgtacACTG tcgtgcAACc agtggggcct 600
cgtgtGCTGC agtgcgtgca tcgctggccc agtgcgcggg tccGCCAGAC ctggTCCGTA 660
ctgctgCTTC tgctcttGTT ctTCatCCCA ggtgtggta tggccgtggc ctacgggctt 720
atctctcgCG agctctactt aggGCTTCGc tttgacGGCG acagtGacAG cgacAGCCAA 780
agcagggtcc gaaACCAAGG cgggctgcca ggggctgttc accagaACGG gcgttGCCGG 840
cctgagactg gcgcggTTgg caaAGACAGC gatggctgct acgtgcaact tccacgttCC 900
cggcctgccc tggagctgac ggcgtgacg gtcctggc CGGGATCCGG ctccCGGCC 960
accCAGGCCA agctgctggc taagaAGCgc gtgaaACGAA tggctgggt gatcgTTGT 1020
ctttttttc tgggtgggtt gccagttat agtgcacaaca cgtggcgcgc ctggatggc 1080
ccgggtgcac accgagcact ctcgggtgct cctatctcct tcattcactt gctgagctac 1140
gcctcggcct gtgtcaaccc cctggcttac tgcttcatgc accgtcgctt tcGCCAGGCC 1200
tgcctggaaa cttgcgtcG ctgctggccc cggcctccac gagctcgccc caggctctt 1260
cccgtgagg accctccac tccctccatt gcttcgtgt ccaggcttag ctacaccacc 1320
atcagcacac tggccctgg ctga 1344

<210> 112
<211> 447
<212> PRT
<213> Homo sapiens

<400> 112

Met Glu Leu Leu Lys Leu Asn Arg Ser Val Gln Gly Thr Gly Pro Gly
1 5 10 15

Pro Gly Ala Ser Leu Cys Arg Pro Gly Ala Pro Leu Leu Asn Ser Ser

Aren0054.ST25.txt

20	25	30
Ser Val Gly Asn Leu Ser Cys Glu Pro Pro Arg Ile Arg Gly Ala Gly		
35	40	45
Thr Arg Glu Leu Glu Leu Ala Ile Arg Ile Thr Leu Tyr Ala Val Ile		
50	55	60
Phe Leu Met Ser Val Gly Gly Asn Met Leu Ile Ile Val Val Leu Gly		
65	70	75
Leu Ser Arg Arg Leu Arg Thr Val Thr Asn Ala Phe Leu Leu Ser Leu		
85	90	95
Ala Val Ser Asp Leu Leu Leu Ala Val Ala Cys Met Pro Phe Thr Leu		
100	105	110
Leu Pro Asn Leu Met Gly Thr Phe Ile Phe Gly Thr Val Ile Cys Lys		
115	120	125
Ala Val Ser Tyr Leu Met Gly Val Ser Val Ser Thr Leu Ser		
130	135	140
Leu Val Ala Ile Ala Leu Glu Arg Tyr Ser Ala Ile Cys Arg Pro Leu		
145	150	155
Gln Ala Arg Val Trp Gln Thr Arg Ser His Ala Ala Arg Val Ile Val		
165	170	175
Ala Thr Trp Leu Leu Ser Gly Leu Leu Met Val Pro Tyr Pro Val Tyr		
180	185	190
Thr Val Val Gln Pro Val Gly Pro Arg Val Leu Gln Cys Val His Arg		
195	200	205
Trp Pro Ser Ala Arg Val Arg Gln Thr Trp Ser Val Leu Leu Leu		
210	215	220
Leu Leu Phe Phe Ile Pro Gly Val Val Met Ala Val Ala Tyr Gly Leu		
225	230	235
Ile Ser Arg Glu Leu Tyr Leu Gly Leu Arg Phe Asp Gly Asp Ser Asp		
245	250	255
Ser Asp Ser Gln Ser Arg Val Arg Asn Gln Gly Gly Leu Pro Gly Ala		
260	265	270
Val His Gln Asn Gly Arg Cys Arg Pro Glu Thr Gly Ala Val Gly Lys		
275	280	285
Asp Ser Asp Gly Cys Tyr Val Gln Leu Pro Arg Ser Arg Pro Ala Leu		
290	295	300
Glu Leu Thr Ala Leu Thr Ala Pro Gly Pro Gly Ser Gly Ser Arg Pro		
305	310	315
Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val Lys Arg Met Leu Leu		
325	330	335
Val Ile Val Val Leu Phe Phe Leu Cys Trp Leu Pro Val Tyr Ser Ala		
340	345	350
Asn Thr Trp Arg Ala Phe Asp Gly Pro Gly Ala His Arg Ala Leu Ser		
355	360	365

Aren0054.ST25.txt

Val Ala Pro Ile Ser Phe Ile His Leu Leu Ser Tyr Ala Ser Ala Cys
370 375 380

Val Asn Pro Leu Val Tyr Cys Phe Met His Arg Arg Phe Arg Gln Ala
385 390 395 400

Cys Leu Glu Thr Cys Ala Arg Cys Cys Pro Arg Pro Pro Arg Ala Arg
405 410 415

Pro Arg Ala Leu Pro Asp Glu Asp Pro Pro Thr Pro Ser Ile Ala Ser
420 425 430

Leu Ser Arg Leu Ser Tyr Thr Ile Ser Thr Leu Gly Pro Gly
435 440 445

<210> 113

<211> 34

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 113

cagcagcatg cgcttcacgc gcttcttagc ccag

34

<210> 114

<211> 35

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 114

agaaggcggtt gaaggcgatg ctgctggta tcgtt

35

<210> 115

<211> 33

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 115

atggagaaaa gaatcaaaag aatgttctat ata

33

<210> 116

<211> 33

<212> DNA

<213> Artificial

<220>

<223> Novel Sequence

<400> 116

tatatagaac attctttga ttctttctc cat

33

<210> 117

<211> 30

Aren0054.ST25.txt

<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 117
cgctctctgg ccttgaagcg cacgctcagc 30

<210> 118
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 118
gctgagcgtg cgcttcaagg ccagagagcg 30

<210> 119
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 119
cccgaggaaaa aggtgaaagt caaagtttc 30

<210> 120
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 120
ggaaaactttg actttcacct ttttccctggg 30

<210> 121
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 121
ggggcgcggg tgaaaacggct ggtgagc 27

<210> 122
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

Aren0054.ST25.txt

<400> 122	gctcaccaggc cgtttacccc gcggcccc	27
<210> 123		
<211> 30		
<212> DNA		
<213> Artificial		
<220>		
<223> Novel Sequence		
<400> 123	cccccgtgaaa agcctaagaa cttggtcata	30
<210> 124		
<211> 30		
<212> DNA		
<213> Artificial		
<220>		
<223> Novel Sequence		
<400> 124	gatgaccaag ttcttaggct tttcaaggggg	30
<210> 125		
<211> 32		
<212> DNA		
<213> Artificial		
<220>		
<223> Novel Sequence		
<400> 125	gatctctaga atgaacagca catgtattga ag	32
<210> 126		
<211> 35		
<212> DNA		
<213> Artificial		
<220>		
<223> Novel Sequence		
<400> 126	ctagggtacc cgctcaagga cctcttaattc catag	35
<210> 127		
<211> 1296		
<212> DNA		
<213> Homo sapiens		
<400> 127	atgcaggcgc ttaacattac cccggagcag ttctctcgcc tgctgcggga ccacaacctg	60
acgcgggagc agttcatcgc tctgtaccgg ctgcgaccgc tcgtctacac cccagagctg	120	
ccgggacgcgc ccaagctggc cctcgtgctc accggcgtgc tcatttcgc cctggcgctc	180	

Aren0054.ST25.txt

tttggcaatg	ctctggtgtt	ctacgtggtg	accgcagca	aggccatgcg	caccgtcacc	240
aacatctta	tctgctcctt	ggcgctcagt	gacctgctca	tcaccttctt	ctgcattccc	300
gtcaccatgc	tccagaacat	ttccgacaac	tggctggggg	gtgcttcat	ttgcaagatg	360
gtgccatttg	tccagtctac	cgctgttgc	acagaaatgc	tcactatgac	ctgcattgct	420
gtggaaaggc	accagggact	tgtgcac	ttaaaatga	agtggcaata	caccaaccga	480
agggcttca	caatgctagg	tgtggctgg	ctggtggcag	tcatcgtagg	atcacccatg	540
tggcacgtgc	aacaacttga	gatcaaata	gacttcctat	atgaaaagga	acacatctgc	600
tgcttagaag	agtggaccag	ccctgtgcac	cagaagatct	acaccacctt	catccttgc	660
atcctttcc	tcctgcctct	tatggtgatg	cttattctgt	acagtaaaat	tggtatgaa	720
ctttggataa	agaaaaagagt	tggggatggt	tcagtgc	gaactattca	tggaaaagaa	780
atgtccaaaa	tagccagggaa	gaagaaacga	gctaagatta	tgatggtgc	agtggggct	840
ctcttgctg	tgtgctgggc	accattccat	gttgtccata	tgatgattga	atacagtaat	900
tttggaaaagg	aatatgatga	tgtcacaatc	aagatgattt	ttgctatcgt	gcaaatttatt	960
ggattttcca	actccatctg	taatcccatt	gtctatgcat	ttatgaatga	aaacttcaaa	1020
aaaaatgttt	tgtctgcagt	ttgttattgc	atagtaata	aaaccttctc	tccagcacaa	1080
aggcatggaa	attcaggaat	tacaatgatg	cggaaagaaag	caaagtttc	cctcagagag	1140
aatccagtgg	aggaaaccaa	aggagaagca	ttcagtgtatg	gcaacattga	agtcaaattg	1200
tgtgaacaga	cagaggagaa	gaaaaagctc	aaacgacatc	ttgctcttt	tagtctgaa	1260
ctggctgaga	attctccctt	agacagtggg	cattaa			1296

<210> 128

<211> 431

<212> PRT

<213> Homo sapiens

<400> 128

Met Gln Ala Leu Asn Ile Thr Pro Glu Gln Phe Ser Arg Leu Leu Arg
1 5 10 15

Asp His Asn Leu Thr Arg Glu Gln Phe Ile Ala Leu Tyr Arg Leu Arg
20 25 30

Pro Leu Val Tyr Thr Pro Glu Leu Pro Gly Arg Ala Lys Leu Ala Leu
35 40 45

Val Leu Thr Gly Val Leu Ile Phe Ala Leu Ala Leu Phe Gly Asn Ala
50 55 60

Leu Val Phe Tyr Val Val Thr Arg Ser Lys Ala Met Arg Thr Val Thr
65 70 75 80

Asn Ile Phe Ile Cys Ser Leu Ala Leu Ser Asp Leu Leu Ile Thr Phe
85 90 95

Phe Cys Ile Pro Val Thr Met Leu Gln Asn Ile Ser Asp Asn Trp Leu

Aren0054.ST25.txt

100

105

110

Gly Gly Ala Phe Ile Cys Lys Met Val Pro Phe Val Gln Ser Thr Ala
 115 120 125

Val Val Thr Glu Met Leu Thr Met Thr Cys Ile Ala Val Glu Arg His
 130 135 140

Gln Gly Leu Val His Pro Phe Lys Met Lys Trp Gln Tyr Thr Asn Arg
 145 150 155 160

Arg Ala Phe Thr Met Leu Gly Val Val Trp Leu Val Ala Val Ile Val
 165 170 175

Gly Ser Pro Met Trp His Val Gln Gln Leu Glu Ile Lys Tyr Asp Phe
 180 185 190

Leu Tyr Glu Lys Glu His Ile Cys Cys Leu Glu Glu Trp Thr Ser Pro
 195 200 205

Val His Gln Lys Ile Tyr Thr Phe Ile Leu Val Ile Leu Phe Leu
 210 215 220

Leu Pro Leu Met Val Met Leu Ile Leu Tyr Ser Lys Ile Gly Tyr Glu
 225 230 235 240

Leu Trp Ile Lys Lys Arg Val Gly Asp Gly Ser Val Leu Arg Thr Ile
 245 250 255

His Gly Lys Glu Met Ser Lys Ile Ala Arg Lys Lys Arg Ala Lys
 260 265 270

Ile Met Met Val Thr Val Val Ala Leu Phe Ala Val Cys Trp Ala Pro
 275 280 285

Phe His Val Val His Met Met Ile Glu Tyr Ser Asn Phe Glu Lys Glu
 290 295 300

Tyr Asp Asp Val Thr Ile Lys Met Ile Phe Ala Ile Val Gln Ile Ile
 305 310 315 320

Gly Phe Ser Asn Ser Ile Cys Asn Pro Ile Val Tyr Ala Phe Met Asn
 325 330 335

Glu Asn Phe Lys Lys Asn Val Leu Ser Ala Val Cys Tyr Cys Ile Val
 340 345 350

Asn Lys Thr Phe Ser Pro Ala Gln Arg His Gly Asn Ser Gly Ile Thr
 355 360 365

Met Met Arg Lys Lys Ala Lys Phe Ser Leu Arg Glu Asn Pro Val Glu
 370 375 380

Glu Thr Lys Gly Glu Ala Phe Ser Asp Gly Asn Ile Glu Val Lys Leu
 385 390 395 400

Cys Glu Gln Thr Glu Glu Lys Lys Leu Lys Arg His Leu Ala Leu
 405 410 415

Phe Arg Ser Glu Leu Ala Glu Asn Ser Pro Leu Asp Ser Gly His
 420 425 430

<210> 129

<211> 2040

<212> DNA

Aren0054.ST25.txt

<213> Homo sapiens

<400>	129					
atggcagcc	cctggaacgg	cagcgacggc	cccgaggggg	cgcgggagcc	gccgtggccc	60
gcgctgccgc	cttgcacga	gcccgcgtgc	tcgccccttc	ccctggggc	gctggtgccc	120
gtgaccgcgt	tgtgcctgtg	cctgttcgtc	gtcggggta	gcccgaacgt	ggtgaccgtg	180
atgctgatcg	ggcgctaccc	ggacatgcgg	accaccacca	acttgtacct	gggcagcatg	240
gccgtgtccg	acctactcat	cctgctcggg	ctgcccgtcg	acctgtacct	cctctggcgc	300
tcgcggccct	gggtgttcgg	gccgctgctc	tgccgcctgt	ccctctacgt	gggcgagggc	360
tgcacctacg	ccacgctgct	gcacatgacc	gcccgtcagcg	tcgagcgtca	cctggccatc	420
tgccggccgc	tccgcgcccc	cgtcttggtc	accggggcgc	gcccgtcagcg	gctcatcgct	480
gtgctctggg	ccgtggcgct	gctctctgca	ggtcccttct	tgttcctgtt	gggcgtcgag	540
caggaccccg	gcatctccgt	agtcccggc	ctcaatggca	ccgcgcggat	cgcctcctcg	600
cctctcgcc	cgtcgccgccc	tctctggctc	tcgcgggcgc	caccgcgtc	cccggcgctcg	660
gggcccggaga	ccgcggaggc	cgcggcgctg	ttcagccgcg	aatgcggcc	gagcccccg	720
cagctggcg	cgctgcgtgt	catgctgtgg	gtcaccaccc	cctacttctt	cctggcccttt	780
ctgtgcctca	gcatcctcta	cgggctcatc	gggcgggagc	tgtggagcag	ccggcggccg	840
ctgcaggccc	cggccgcctc	ggggcgggag	agaggccacc	ggcagaccaa	acgcgtcctg	900
cgtaagtgg	gccgcccgtgg	ttccaaagac	gcctgcgtc	agtccgcctt	gccggggacc	960
gcgc当地	tgggtccccct	tcccctgctc	gccagctct	gggcggcgct	tccagctccc	1020
tttccattt	cgattccagc	ctccacccgc	cgtacttcc	catccccga	gaaaaccatg	1080
tcctgtcccc	caggagctct	gggggacccc	agggcgctt	gagggtggga	tcccccggatc	1140
cgattcagta	accagcgtg	ctttccaga	gcctctgaga	ccagaaagga	gagttggtaa	1200
ttcttaatcc	aaccacctgt	tagatgccac	aaatgaggag	tcctcacagt	gctcttgaga	1260
agacgaggga	gatttcatta	agctaaaatt	ttttatcaa	tgttaagtga	tgctgaaggc	1320
taaagtaaac	tttgctcgta	tcaaaaagta	aagattgtgc	agacctgttg	tagaattctt	1380
ttcaacagag	aacagaaaac	ttgtctccga	agtgggtttg	tggaaggaag	cctgccaagg	1440
cggcttggc	agagaaaattg	ctccttctgg	tttatgtcca	gccttgataa	cacatatgg	1500
agcctactat	gcagttttaa	agcaagtatc	catgcagcct	gcagcctgtt	catttttct	1560
gggggtggaa	tctgcctagg	tagaagtttt	ctctaattta	ttttgctgtt	acttgttatt	1620
gcagatggtt	ccttgcggg	gtgggggtt	tatttgcttc	ccaatgcctt	tgttaatccc	1680
ggtgctgtgt	cttatgttgc	agtgggtgt	gttctggcat	ttataatttg	ctgggtgccc	1740
ttccacgttg	gcagaatcat	ttacataaac	acggaagatt	cgccgatgat	gtacttctct	1800
cagtaacttta	acatcgctcg	tctgcaactt	ttctatctga	gcccgtat	caacccaatc	1860

Aren0054.ST25.txt

ctctacaacc tcatttcaaa gaagtacaga gcggcggcct ttaaactgct gctcgcaagg 1920
 aagtccaggc cgagaggctt ccacagaagc agggacactg cgggggaagt tgcaggggac 1980
 actgaggag acacggtggg ctacaccgag acaagcgcta acgtgaagac gatgggataa 2040

<210> 130
 <211> 412
 <212> PRT
 <213> Homo sapiens

<400> 130

Met Gly Ser Pro Trp Asn Gly Ser Asp Gly Pro Glu Gly Ala Arg Glu
 1 5 10 15

Pro Pro Trp Pro Ala Leu Pro Pro Cys Asp Glu Arg Arg Cys Ser Pro
 20 25 30

Phe Pro Leu Gly Ala Leu Val Pro Val Thr Ala Val Cys Leu Cys Leu
 35 40 45

Phe Val Val Gly Val Ser Gly Asn Val Val Thr Val Met Leu Ile Gly
 50 55 60

Arg Tyr Arg Asp Met Arg Thr Thr Thr Asn Leu Tyr Leu Gly Ser Met
 65 70 75 80

Ala Val Ser Asp Leu Leu Ile Leu Gly Leu Pro Phe Asp Leu Tyr
 85 90 95

Arg Leu Trp Arg Ser Arg Pro Trp Val Phe Gly Pro Leu Leu Cys Arg
 100 105 110

Leu Ser Leu Tyr Val Gly Glu Gly Cys Thr Tyr Ala Thr Leu Leu His
 115 120 125

Met Thr Ala Leu Ser Val Glu Arg Tyr Leu Ala Ile Cys Arg Pro Leu
 130 135 140

Arg Ala Arg Val Leu Val Thr Arg Arg Arg Val Arg Ala Leu Ile Ala
 145 150 155 160

Val Leu Trp Ala Val Ala Leu Leu Ser Ala Gly Pro Phe Leu Phe Leu
 165 170 175

Val Gly Val Glu Gln Asp Pro Gly Ile Ser Val Val Pro Gly Leu Asn
 180 185 190

Gly Thr Ala Arg Ile Ala Ser Ser Pro Leu Ala Ser Ser Pro Pro Leu
 195 200 205

Trp Leu Ser Arg Ala Pro Pro Pro Ser Pro Pro Ser Gly Pro Glu Thr
 210 215 220

Ala Glu Ala Ala Ala Leu Phe Ser Arg Glu Cys Arg Pro Ser Pro Ala
 225 230 235 240

Gln Leu Gly Ala Leu Arg Val Met Leu Trp Val Thr Thr Ala Tyr Phe
 245 250 255

Phe Leu Pro Phe Leu Cys Leu Ser Ile Leu Tyr Gly Leu Ile Gly Arg
 260 265 270

Aren0054.ST25.txt

Glu Leu Trp Ser Ser Arg Arg Pro Leu Arg Gly Pro Ala Ala Ser Gly
 275 280 285

Arg Glu Arg Gly His Arg Gln Thr Lys Arg Val Leu Leu Val Val Val
 290 295 300 305

Leu Ala Phe Ile Ile Cys Trp Leu Pro Phe His Val Gly Arg Ile Ile
 305 310 315 320

Tyr Ile Asn Thr Glu Asp Ser Arg Met Met Tyr Phe Ser Gln Tyr Phe
 325 330 335

Asn Ile Val Ala Leu Gln Leu Phe Tyr Leu Ser Ala Ser Ile Asn Pro
 340 345 350

Ile Leu Tyr Asn Leu Ile Ser Lys Lys Tyr Arg Ala Ala Ala Phe Lys
 355 360 365

Leu Leu Leu Ala Arg Lys Ser Arg Pro Arg Gly Phe His Arg Ser Arg
 370 375 380

Asp Thr Ala Gly Glu Val Ala Gly Asp Thr Gly Gly Asp Thr Val Gly
 385 390 395 400

Tyr Thr Glu Thr Ser Ala Asn Val Lys Thr Met Gly
 405 410

<210> 131

<211> 1344

<212> DNA

<213> Homo sapiens

<400> 131

atggagctgc taaagctgaa ccggagcgtg cagggAACCG gacCCGGGCC	60
ctgtGCCGCC CGGGGGCGCC ttcctcaac agcagcagtg tggcaacct cagctgcgag	120
ccccctcgca ttgcggagc cggcacacga gaattggagc tggccattag aatcaCTT	180
tacgcagtga tttcctgat gagcgttgaa ggaaatatgc tcatacatgt ggtctggaa	240
ctgagCCGCC gcctgaggac tgtcaccaat gccttccTCC tctcactggc agtcagcgc	300
ctcctgctgg ctgtggcttg catgccCTTC accctctgc ccaatctcat gggcacattc	360
atctttggca ccgtcatctg caaggcggtt tcctaccTCA tgggggtgtc tgtgagtgtg	420
tccacgctaa gcctcgTGGC catcgcaCTG gagcgatata gcGCCATCTG ccgaccACTG	480
caggcacgag tgtggcagac gcgcTCCCAC gcggctcgCG tgattgtAGC cacgtggctg	540
ctgtccggac tactcatggt gccctacccc gtgtacACTG tcgtgcaACC agtggggcct	600
cgtgtgctgc agtgcgtgca tcgctggccc agtgcgcggg tccGCCAGAC ctggTCCGTA	660
ctgctgCTTC tgctcttgtt cttcatccca ggtgtggta tggccgtggc ctacggcTT	720
atctctcgCG agctctactt agggcttcgc tttgacggcg acagtgcACAG cgacAGCCAA	780
agcagggtcc gaaaccaagg cgggctgCCA gggcgtgttc accagaacgg gcgttgcgg	840
cctgagactg ggcgcgttgg caaagacAGC gatggctgct acgtgcaact tccacgttcc	900
cggcctgccc tggagctgac ggcgcgtgac gctcctggc cggatccgg ctccggcccc	960

Aren0054.ST25.txt

acccaggcca	agctgctggc	taagaagcgc	gtgaaacgaa	tgttgcttgt	gatcgttgt	1020
ccttttttc	tgtgttgggtt	gccagtttat	agtgc当地aca	cgtggcgcgc	ctttgatggc	1080
ccgggtgcac	accgagcac	ctcgggtgct	cctatctcct	tcattcaactt	gctgagctac	1140
gcctcggcct	gtgtcaaccc	cctggctctac	tgcttcatgc	accgtcgctt	tcgcccaggcc	1200
tgcctggaaa	cttgcgctcg	ctgctgcccc	cggcctccac	gagctcgccc	cagggtctt	1260
cccgatgagg	accctccac	tccctccatt	gcttcgctgt	ccaggcttag	ctacaccacc	1320
atcagcacac	tgggccctgg	ctga				1344

<210> 132

<211> 447

<212> PRT

<213> Homo sapiens

<400> 132

Met	Glu	Leu	Leu	Lys	Leu	Asn	Arg	Ser	Val	Gln	Gly	Thr	Gly	Pro	Gly
1				5				10				15			

Pro	Gly	Ala	Ser	Leu	Cys	Arg	Pro	Gly	Ala	Pro	Leu	Leu	Asn	Ser	Ser
				20				25				30			

Ser	Val	Gly	Asn	Leu	Ser	Cys	Glu	Pro	Pro	Arg	Ile	Arg	Gly	Ala	Gly
				35			40			45					

Thr	Arg	Glu	Leu	Glu	Leu	Ala	Ile	Arg	Ile	Thr	Leu	Tyr	Ala	Val	Ile
				50			55			60					

Phe	Leu	Met	Ser	Val	Gly	Gly	Asn	Met	Leu	Ile	Ile	Val	Val	Leu	Gly
				65			70			75			80		

Leu	Ser	Arg	Arg	Leu	Arg	Thr	Val	Thr	Asn	Ala	Phe	Leu	Leu	Ser	Leu
							85		90			95			

Ala	Val	Ser	Asp	Leu	Leu	Leu	Ala	Val	Ala	Cys	Met	Pro	Phe	Thr	Leu
				100			105			110					

Leu	Pro	Asn	Leu	Met	Gly	Thr	Phe	Ile	Phe	Gly	Thr	Val	Ile	Cys	Lys
				115			120			125					

Ala	Val	Ser	Tyr	Leu	Met	Gly	Val	Ser	Val	Ser	Thr	Leu	Ser		
				130			135			140					

Leu	Val	Ala	Ile	Ala	Leu	Glu	Arg	Tyr	Ser	Ala	Ile	Cys	Arg	Pro	Leu
				145			150			155			160		

Gln	Ala	Arg	Val	Trp	Gln	Thr	Arg	Ser	His	Ala	Ala	Arg	Val	Ile	Val
				165			170			175					

Ala	Thr	Trp	Leu	Leu	Ser	Gly	Leu	Leu	Met	Val	Pro	Tyr	Pro	Val	Tyr
				180			185			190					

Thr	Val	Val	Gln	Pro	Val	Gly	Pro	Arg	Val	Leu	Gln	Cys	Val	His	Arg
				195			200			205					

Trp	Pro	Ser	Ala	Arg	Val	Arg	Gln	Thr	Trp	Ser	Val	Leu	Leu	Leu	
				210			215			220					

Leu	Leu	Phe	Phe	Ile	Pro	Gly	Val	Val	Met	Ala	Val	Ala	Tyr	Gly	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Aren0054.ST25.txt

225	230	235	240
-----	-----	-----	-----

Ile Ser Arg Glu Leu Tyr Leu Gly Leu Arg Phe Asp Gly Asp Ser Asp			
245	250	255	

Ser Asp Ser Gln Ser Arg Val Arg Asn Gln Gly Gly Leu Pro Gly Ala			
260	265	270	

Val His Gln Asn Gly Arg Cys Arg Pro Glu Thr Gly Ala Val Gly Lys			
275	280	285	

Asp Ser Asp Gly Cys Tyr Val Gln Leu Pro Arg Ser Arg Pro Ala Leu			
290	295	300	

Glu Leu Thr Ala Leu Thr Ala Pro Gly Pro Gly Ser Gly Ser Arg Pro			
305	310	315	320

Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val Lys Arg Met Leu Leu			
325	330	335	

Val Ile Val Val Leu Phe Phe Leu Cys Trp Leu Pro Val Tyr Ser Ala			
340	345	350	

Asn Thr Trp Arg Ala Phe Asp Gly Pro Gly Ala His Arg Ala Leu Ser			
355	360	365	

Val Ala Pro Ile Ser Phe Ile His Leu Leu Ser Tyr Ala Ser Ala Cys			
370	375	380	

Val Asn Pro Leu Val Tyr Cys Phe Met His Arg Arg Phe Arg Gln Ala			
385	390	395	400

Cys Leu Glu Thr Cys Ala Arg Cys Cys Pro Arg Pro Pro Arg Ala Arg			
405	410	415	

Pro Arg Ala Leu Pro Asp Glu Asp Pro Pro Thr Pro Ser Ile Ala Ser			
420	425	430	

Leu Ser Arg Leu Ser Tyr Thr Ile Ser Thr Leu Gly Pro Gly			
435	440	445	

<210> 133

<211> 1014

<212> DNA

<213> Homo sapiens

<400> 133 atgaacagca catgtattga agaacagcat gacctggatc actatttgtt tcccatgttt 60

tacatctttg tgattatagt cagcattcca gccaatattt gatctctgtg tgtgtctttc 120

ctgcaagcaa agaaggaaag tgaacttagga atttacctct tcagtttgtc actatcgat 180

ttactctatg cattaactct cccttatgg attgattata ctggaaataa agacaactgg 240

actttctctc ctgccttgtg caaaggagt gctttctca tgtacatgaa tttttacagc 300

agcacagcat tcctcacctg cattgccgtt gatcggtt tggctgtgt ctacccttt 360

aagtttttt tcctaaggac aagaagattt gcactcatgg tcagcctgtc catctggata 420

ttggaaacca tcttcaatgc tgtcatgtt tggaaagatg aaacagtgt tgaatattgc 480

gatgccaaaa agtctaattt tacttatgc tatgacaaat accctttaga gaaatggcaa 540

Aren0054.ST25.txt

atcaacctca	acttgttca	gacgtgtaca	ggctatgcaa	tacctttgg	caccatcctg	600
atctgtaacc	ggaaagtcta	ccaagctgtg	cggcacaata	aagccacgga	aaacaaggaa	660
aagaagagaa	tcaaaaaact	acttgtcagc	atcacagtta	ctttgtctt	atgctttact	720
cccttcatg	tgatgttgct	gattcgctgc	attttagagc	atgctgtgaa	cttcgaagac	780
cacagcaatt	ctgggaagcg	aacttacaca	atgtatagaa	tcacggttgc	attaacaagt	840
ttaaattgtg	ttgctgatcc	aattctgtac	tgtttgtta	ccgaaacagg	aagatatgat	900
atgtggaata	tattaaaatt	ctgcaactgg	aggtgtaata	catcacaaag	acaaagaaaa	960
cgcatactt	ctgtgtctac	aaaagatact	atggaattag	aggtccttga	gtag	1014

<210> 134

<211> 337

<212> PRT

<213> Homo sapiens

<400> 134

Met	Asn	Ser	Thr	Cys	Ile	Glu	Glu	Gln	His	Asp	Leu	Asp	His	Tyr	Leu
1				5				10					15		

Phe	Pro	Ile	Val	Tyr	Ile	Phe	Val	Ile	Ile	Val	Ser	Ile	Pro	Ala	Asn
				20				25				30			

Ile	Gly	Ser	Leu	Cys	Val	Ser	Phe	Leu	Gln	Ala	Lys	Lys	Glu	Ser	Glu
				35			40				45				

Leu	Gly	Ile	Tyr	Leu	Phe	Ser	Leu	Ser	Leu	Ser	Asp	Leu	Leu	Tyr	Ala
				50			55			60					

Leu	Thr	Leu	Pro	Leu	Trp	Ile	Asp	Tyr	Thr	Trp	Asn	Lys	Asp	Asn	Trp
				65			70		75		80				

Thr	Phe	Ser	Pro	Ala	Leu	Cys	Lys	Gly	Ser	Ala	Phe	Leu	Met	Tyr	Met
				85			90			95					

Asn	Phe	Tyr	Ser	Ser	Thr	Ala	Phe	Leu	Thr	Cys	Ile	Ala	Val	Asp	Arg
				100			105			110					

Tyr	Leu	Ala	Val	Val	Tyr	Pro	Leu	Lys	Phe	Phe	Phe	Leu	Arg	Thr	Arg
				115			120			125					

Arg	Phe	Ala	Leu	Met	Val	Ser	Leu	Ser	Ile	Trp	Ile	Leu	Glu	Thr	Ile
				130			135			140					

Phe	Asn	Ala	Val	Met	Leu	Trp	Glu	Asp	Glu	Thr	Val	Val	Glu	Tyr	Cys
				145			150		155		160				

Asp	Ala	Glu	Lys	Ser	Asn	Phe	Thr	Leu	Cys	Tyr	Asp	Lys	Tyr	Pro	Leu
				165			170		175						

Glu	Lys	Trp	Gln	Ile	Asn	Leu	Asn	Leu	Phe	Arg	Thr	Cys	Thr	Gly	Tyr
				180			185		190						

Ala	Ile	Pro	Leu	Val	Thr	Ile	Leu	Ile	Cys	Asn	Arg	Lys	Val	Tyr	Gln
				195			200		205						

Ala	Val	Arg	His	Asn	Lys	Ala	Thr	Glu	Asn	Lys	Glu	Lys	Lys	Arg	Ile
				210			215		220						

Aren0054.ST25.txt

Lys Lys Leu Leu Val Ser Ile Thr Val Thr Phe Val Leu Cys Phe Thr
225 230 235 240

Pro Phe His Val Met Leu Leu Ile Arg Cys Ile Leu Glu His Ala Val
245 250 255

Asn Phe Glu Asp His Ser Asn Ser Gly Lys Arg Thr Tyr Thr Met Tyr
260 265 270

Arg Ile Thr Val Ala Leu Thr Ser Leu Asn Cys Val Ala Asp Pro Ile
275 280 285

Leu Tyr Cys Phe Val Thr Glu Thr Gly Arg Tyr Asp Met Trp Asn Ile
290 295 300

Leu Lys Phe Cys Thr Gly Arg Cys Asn Thr Ser Gln Arg Gln Arg Lys
305 310 315 320

Arg Ile Leu Ser Val Ser Thr Lys Asp Thr Met Glu Leu Glu Val Leu
325 330 335

Glu

<210> 135
<211> 999
<212> DNA
<213> Homo sapiens

<400> 135
atggtaact ccaccacccg tggatgcac acttctctgc acctctggaa ccgcagcagt 60
tacagactgc acagcaatgc cagttagtcc ctggaaaag gctactctga tggagggtgc 120
tacgagcaac ttttgtctc tcctgagggtg tttgtgactc tgggtgtcat cagttgttg 180
gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc accatgtac 240
ttttcatct gcagcttggc tggctgtat atgctggta gcgttcaaa tggatcagaa 300
accattatca tcaccctatt aaacagtaca gatacgatg cacagatcc cacagtgaat 360
attgataatg tcattgactc ggtgatctgt agtccttgc ttgcattccat ttgcagcctg 420
cttcaattt cagttggacag gtactttact atcttctatg ctctccagta ccataacatt 480
atgacagtta agcgggttgg gatcagcata agttgtatct gggcagcttgc cacgtttca 540
ggcattttgt tcatcattt ctcagatagt agtgctgtca tcattgcct catcaccatg 600
ttcttcacca tgctggctct catggcttct ctctatgtcc acatgttccat gatggccagg 660
cttcacatta agaggattgc tgcctcccc ggcactggtg ccatccggca aggtgcacat 720
atgaaggaa aaattacattt gaccatcctg attggcgatct ttgttgcctg ctggcccca 780
ttcttcctcc acttaatattt ctacatcttct tgcctcaga atccatattt tgcgtgcattc 840
atgtctcact ttaacttgcata tctcatactg atcatgtgta attcaatcat cgatcctctg 900
atttatgcac tccggagtcata agaactgagg aaaaccttca aagagatcat ctgttgctat 960
ccccctggag gcctttgtga cttgtctagc agatattaa 999

Aren0054.ST25.txt

<210> 136
<211> 332
<212> PRT
<213> Homo sapiens

<400> 136

Met Val Asn Ser Thr His Arg Gly Met His Thr Ser Leu His Leu Trp
1 5 10 15

Asn Arg Ser Ser Tyr Arg Leu His Ser Asn Ala Ser Glu Ser Leu Gly
20 25 30

Lys Gly Tyr Ser Asp Gly Gly Cys Tyr Glu Gln Leu Phe Val Ser Pro
35 40 45

Glu Val Phe Val Thr Leu Gly Val Ile Ser Leu Leu Glu Asn Ile Leu
50 55 60

Val Ile Val Ala Ile Ala Lys Asn Lys Asn Leu His Ser Pro Met Tyr
65 70 75 80

Phe Phe Ile Cys Ser Leu Ala Val Ala Asp Met Leu Val Ser Val Ser
85 90 95

Asn Gly Ser Glu Thr Ile Ile Ile Thr Leu Leu Asn Ser Thr Asp Thr
100 105 110

Asp Ala Gln Ser Phe Thr Val Asn Ile Asp Asn Val Ile Asp Ser Val
115 120 125

Ile Cys Ser Ser Leu Leu Ala Ser Ile Cys Ser Leu Leu Ser Ile Ala
130 135 140

Val Asp Arg Tyr Phe Thr Ile Phe Tyr Ala Leu Gln Tyr His Asn Ile
145 150 155 160

Met Thr Val Lys Arg Val Gly Ile Ser Ile Ser Cys Ile Trp Ala Ala
165 170 175

Cys Thr Val Ser Gly Ile Leu Phe Ile Ile Tyr Ser Asp Ser Ser Ala
180 185 190

Val Ile Ile Cys Leu Ile Thr Met Phe Phe Thr Met Leu Ala Leu Met
195 200 205

Ala Ser Leu Tyr Val His Met Phe Leu Met Ala Arg Leu His Ile Lys
210 215 220

Arg Ile Ala Val Leu Pro Gly Thr Gly Ala Ile Arg Gln Gly Ala Asn
225 230 235 240

Met Lys Gly Lys Ile Thr Leu Thr Ile Leu Ile Gly Val Phe Val Val
245 250 255

Cys Trp Ala Pro Phe Phe Leu His Leu Ile Phe Tyr Ile Ser Cys Pro
260 265 270

Gln Asn Pro Tyr Cys Val Cys Phe Met Ser His Phe Asn Leu Tyr Leu
275 280 285

Ile Leu Ile Met Cys Asn Ser Ile Ile Asp Pro Leu Ile Tyr Ala Leu
290 295 300

Aren0054.ST25.txt

Arg Ser Gln Glu Leu Arg Lys Thr Phe Lys Glu Ile Ile Cys Cys Tyr
305 310 315 320

Pro Leu Gly Gly Leu Cys Asp Leu Ser Ser Arg Tyr
325 330

<210> 137
<211> 33
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 137
gccaatatga agggaaaaat taccttgacc atc 33

<210> 138
<211> 31
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 138
ctccttcgtt cctcctatcg ttgtcagaag t 31

<210> 139
<211> 1842
<212> DNA
<213> Homo sapiens

<400> 139
atggggccca ccctagcggt tcccaccccc tatggctgta ttggctgtaa gctaccccg 60

ccagaataacc caccggctct aatcatcttt atgttctgcg cgatggttat caccatcg 120

gtagacctaa tcggcaactc catggtcatt ttggctgtga cgaagaacaa gaagctccgg 180

aattctggca acatcttcgtt ggtcagtctc tctgtggccg atatgctggt ggccatctac 240

ccataccctt ttagtctgca tgccatgtcc attggggctt gggatctgag ccagttacag 300

tgccagatgg tcgggttcat cacaggctg agtgtggctg gctccatctt caacatcg 360

gcaatcgcta tcaaccgtta ctgctacatc tgccacagcc tccagttacga acggatcttc 420

agtgtgcgca atacctgcat ctacctggc atcacctgga tcatgaccgt cctggctgtc 480

ctgccaaca tgtacattgg caccatcgag tacgatcctc gcacctacac ctgcacatcttc 540

aactatctga acaaccctgtt cttcactgtt accatcgctt gcatccactt cgtccctcc 600

ctcctcatcg tgggttctg ctacgtgagg atctggacca aagtgctggc ggcccggtgac 660

cctgcaggc agaattctga caaccaactt gctgagggttc gcaattttctt aaccatgttt 720

gtgatcttcc tcctctttgc agtgtgctgg tgccctatca acgtgctcac tgtctggtg 780

gctgtcagtc cgaaggagat ggcaggcaag atccccaaact ggctttatct tgcagcctac 840

ttcatacgctt acttcaacag ctgcctcaac gctgtgatct acgggctcctt caatgagaat 900

Aren0054.ST25.txt

ttccgaagag	aatactggac	catcttccat	gctatgcggc	accctatcat	attcttcct	960										
ggcctcatca	gtgatattcg	tgagatgcag	gaggccccgt	ccctggcccc	cgcgcgtgcc	1020										
catgctcg	accaagctcg	tgaacaagac	cgtccccatg	cctgtcctgc	tgtggaggaa	1080										
accccgatga	atgtccggaa	tgttccatta	cctggtgatg	ctgcagctgg	ccaccccgac	1140										
cgtgcctctg	gccaccctaa	gcccccattcc	agatcctcct	ctgcctatcg	caaatctgcc	1200										
tctacccacc	acaagtctgt	ctttagccac	tccaaggctg	cctctggtca	cctcaaggct	1260										
gtctctggcc	actccaagcc	tgcctctgg	caccccaagt	ctgccactgt	ctaccctaag	1320										
cctgcctctg	tccatttcaa	gggtgactct	gtccatttca	agggtgactc	tgtccatttc	1380										
aagcctgact	ctgttcattt	caagcctgct	tccagcaacc	ccaagcccat	cactggccac	1440										
catgtctctg	ctggcagcca	ctccaagtct	gccttcagtg	ctgccaccag	ccacccctaaa	1500										
cccatcaagc	cagctaccag	ccatgctgag	cccaccactg	ctgactatcc	caaggctgcc	1560										
actaccagcc	accctaagcc	cgctgctgct	gacaaccctg	agctctctgc	ctccattgc	1620										
cccgagatcc	ctgccattgc	ccaccctgtg	tctgacgaca	gtgacccccc	tgagtggcc	1680										
tctagccctg	ccgctggcc	caccaagcct	gctgccagcc	agctggagtc	tgacaccatc	1740										
gctgacccctc	ctgaccctac	tgttagtca	accagtagcca	atgattacca	tgtatgcgtg	1800										
gttggatg	ttgaagatga	tcctgatgaa	atggctgtgt	ga		1842										
<210>	140															
<211>	613															
<212>	PRT															
<213>	Homo sapiens															
<400>	140															
Met	Gly	Pro	Thr	Leu	Ala	Val	Pro	Thr	Pro	Tyr	Gly	Cys	Ile	Gly	Cys	
1				5				10					15			
Lys	Leu	Pro	Gln	Pro	Glu	Tyr	Pro	Pro	Ala	Ile	Ile	Ile	Phe	Met	Phe	
				20				25					30			
Cys	Ala	Met	Val	Ile	Thr	Ile	Val	Val	Asp	Leu	Ile	Gly	Asn	Ser	Met	
				35				40					45			
Val	Ile	Leu	Ala	Val	Thr	Lys	Asn	Lys	Leu	Arg	Asn	Ser	Gly	Asn		
				50				55					60			
Ile	Phe	Val	Val	Ser	Leu	Ser	Val	Ala	Asp	Met	Leu	Val	Ala	Ile	Tyr	
				65				70					75		80	
Pro	Tyr	Pro	Leu	Met	Leu	His	Ala	Met	Ser	Ile	Gly	Gly	Trp	Asp	Leu	
				85				90					95			
Ser	Gln	Leu	Gln	Cys	Gln	Met	Val	Gly	Phe	Ile	Thr	Gly	Leu	Ser	Val	
				100				105					110			
Val	Gly	Ser	Ile	Phe	Asn	Ile	Val	Ala	Ile	Ala	Ile	Asn	Arg	Tyr	Cys	
				115				120					125			

Aren0054.ST25.txt

Tyr Ile Cys His Ser Leu Gln Tyr Glu Arg Ile Phe Ser Val Arg Asn
130 135 140

Thr Cys Ile Tyr Leu Val Ile Thr Trp Ile Met Thr Val Leu Ala Val
145 150 155 160

Leu Pro Asn Met Tyr Ile Gly Thr Ile Glu Tyr Asp Pro Arg Thr Tyr
165 170 175

Thr Cys Ile Phe Asn Tyr Leu Asn Asn Pro Val Phe Thr Val Thr Ile
180 185 190

Val Cys Ile His Phe Val Leu Pro Leu Leu Ile Val Gly Phe Cys Tyr
195 200 205

Val Arg Ile Trp Thr Lys Val Leu Ala Ala Arg Asp Pro Ala Gly Gln
210 215 220

Asn Pro Asp Asn Gln Leu Ala Glu Val Arg Asn Phe Leu Thr Met Phe
225 230 235 240

Val Ile Phe Leu Leu Phe Ala Val Cys Trp Cys Pro Ile Asn Val Leu
245 250 255

Thr Val Leu Val Ala Val Ser Pro Lys Glu Met Ala Gly Lys Ile Pro
260 265 270

Asn Trp Leu Tyr Leu Ala Ala Tyr Phe Ile Ala Tyr Phe Asn Ser Cys
275 280 285

Leu Asn Ala Val Ile Tyr Gly Leu Leu Asn Glu Asn Phe Arg Arg Glu
290 295 300

Tyr Trp Thr Ile Phe His Ala Met Arg His Pro Ile Ile Phe Phe Pro
305 310 315 320

Gly Leu Ile Ser Asp Ile Arg Glu Met Gln Glu Ala Arg Thr Leu Ala
325 330 335

Arg Ala Arg Ala His Ala Arg Asp Gln Ala Arg Glu Gln Asp Arg Ala
340 345 350

His Ala Cys Pro Ala Val Glu Glu Thr Pro Met Asn Val Arg Asn Val
355 360 365

Pro Leu Pro Gly Asp Ala Ala Ala Gly His Pro Asp Arg Ala Ser Gly
370 375 380

His Pro Lys Pro His Ser Arg Ser Ser Ala Tyr Arg Lys Ser Ala
385 390 395 400

Ser Thr His His Lys Ser Val Phe Ser His Ser Lys Ala Ala Ser Gly
405 410 415

His Leu Lys Pro Val Ser Gly His Ser Lys Pro Ala Ser Gly His Pro
420 425 430

Lys Ser Ala Thr Val Tyr Pro Lys Pro Ala Ser Val His Phe Lys Gly
435 440 445

Asp Ser Val His Phe Lys Gly Asp Ser Val His Phe Lys Pro Asp Ser
450 455 460

Val His Phe Lys Pro Ala Ser Ser Asn Pro Lys Pro Ile Thr Gly His
465 470 475 480

Aren0054.ST25.txt

His Val Ser Ala Gly Ser His Ser Lys Ser Ala Phe Ser Ala Ala Thr
 485 490 495

Ser His Pro Lys Pro Ile Lys Pro Ala Thr Ser His Ala Glu Pro Thr
 500 505 510

Thr Ala Asp Tyr Pro Lys Pro Ala Thr Thr Ser His Pro Lys Pro Ala
 515 520 525

Ala Ala Asp Asn Pro Glu Leu Ser Ala Ser His Cys Pro Glu Ile Pro
 530 535 540

Ala Ile Ala His Pro Val Ser Asp Asp Ser Asp Leu Pro Glu Ser Ala
 545 550 555 560

Ser Ser Pro Ala Ala Gly Pro Thr Lys Pro Ala Ala Ser Gln Leu Glu
 565 570 575

Ser Asp Thr Ile Ala Asp Leu Pro Asp Pro Thr Val Val Thr Thr Ser
 580 585 590

Thr Asn Asp Tyr His Asp Val Val Val Asp Val Glu Asp Asp Pro
 595 600 605

Asp Glu Met Ala Val
 610

<210> 141

<211> 1842

<212> DNA

<213> Homo sapiens

<400> 141

atggggccca ccctagcggt tcccacccccc tatggctgta ttggctgtaa gctaccccaag 60

ccagaataacc caccggctct aatcatcttt atgttctgcg cgatggttat caccatcggt 120

gtagacctaa tcggcaactc catggtcatt ttggctgtga cgaagaacaa gaagctccgg 180

aattctggca acatcttcgt ggtcagtctc tctgtggccg atatgctgtt ggccatctac 240

ccataccctt tgatgctgca tgccatgtcc attggggct gggatctgag ccagttacag 300

tgccagatgg tcgggttcat cacaggctg agtgtggtcg gctccatctt caacatcggt 360

gcaatcgcta tcaaccgtta ctgctacatc tgccacagcc tccagtgacg acggatcttc 420

agtgtgcgca atacctgcat ctacctggtc atcacctgga tcatgaccgt cctggctgtc 480

ctgcccaaca tgtacattgg caccatcgag tacgatcctc gcacctacac ctgcacatcttc 540

aactatctga acaaccctgt cttcaactgatctt accatcgatct gcatccactt cgtccctccct 600

ctcctcatcg tgggttctg ctacgtgagg atctggacca aagtgctggc ggcccggtac 660

cctgcagggc agaattcctga caaccaactt gctgagggttc gcaataaact aaccatgttt 720

gtgatcttcc tcctcttgc agtgtgctgg tgccctatca acgtgctcac tgtcttgggtg 780

gctgtcagtc cgaaggagat ggcaggcaag atccccact ggctttatct tgcagcctac 840

ttccatagcct acttcaacag ctgcctcaac gctgtgatct acgggctccct caatgagaat 900

ttccgaagag aatactggac catcttccat gctatgcggc accctatcat attcttctct 960

Aren0054.ST25.txt

ggcctcatca	gtgatattcg	tgagatgcag	gaggcccgta	ccctggccc	cgttgtgcc	1020
catgctcgcg	accaagctcg	tgaacaagac	cgtgcccatt	cctgtcctgc	tgtggaggaa	1080
accccgatga	atgtccggaa	tgttccatta	cctgggtatg	ctgcagctgg	ccaccccgac	1140
cgtgcctctg	gccaccctaa	gccccattcc	agatcctcct	ctgcctatcg	caaatctgcc	1200
tctaccacc	acaagtctgt	ctttagccac	tccaaggctg	cctctggta	cctcaaggct	1260
gtctctggcc	actccaagcc	tgcctctgg	caccccaagt	ctgcccactgt	ctaccctaag	1320
cctgcctctg	tccatttcaa	ggctgactct	gtccatttca	agggtgactc	tgtccatttc	1380
aagcctgact	ctgttcattt	caaggctgct	tccagcaacc	ccaagcccat	cactggccac	1440
catgtctctg	ctggcagcca	ctccaaagtct	gccttcaatg	ctgcccaccag	ccacccctaaa	1500
cccatcaagc	cagctaccag	ccatgctgag	cccaccactg	ctgactatcc	caagcctgcc	1560
actaccagcc	accctaagcc	cgctgctgct	gacaaccctg	agctctctgc	ctcccattgc	1620
cccgagatcc	ctgcccattgc	ccaccctgtg	tctgacgaca	gtgacccccc	ttagtcggcc	1680
tctagccctg	ccgctggcc	caccaagcct	gctgccagcc	agctggagtc	tgacaccatc	1740
gctgacccttc	ctgaccctac	tgttagtact	accagtagcca	atgattacca	tgtatgtcgtg	1800
gttggatgatg	ttgaagatga	tcctgatgaa	atggctgtgt	ga		1842

<210> 142
<211> 613
<212> PRT
<213> Homo sapiens

<400> 142

Met Gly Pro Thr Leu Ala Val Pro Thr Pro Tyr Gly Cys Ile Gly Cys
1 5 10 15

Lys Leu Pro Gln Pro Glu Tyr Pro Pro Ala Leu Ile Ile Phe Met Phe
20 25 30

Cys Ala Met Val Ile Thr Ile Val Val Asp Leu Ile Gly Asn Ser Met
35 40 45

Val Ile Leu Ala Val Thr Lys Asn Lys Lys Leu Arg Asn Ser Gly Asn
50 55 60

Ile Phe Val Val Ser Leu Ser Val Ala Asp Met Leu Val Ala Ile Tyr
65 70 75 80

Pro Tyr Pro Leu Met Leu His Ala Met Ser Ile Gly Gly Trp Asp Leu
85 90 95

Ser Gln Leu Gln Cys Gln Met Val Gly Phe Ile Thr Gly Leu Ser Val
100 105 110

Val Gly Ser Ile Phe Asn Ile Val Ala Ile Ala Ile Asn Arg Tyr Cys
115 120 125

Tyr Ile Cys His Ser Leu Gln Tyr Glu Arg Ile Phe Ser Val Arg Asn
130 135 140

Aren0054.ST25.txt

Thr Cys Ile Tyr Leu Val Ile Thr Trp Ile Met Thr Val Leu Ala Val
145 150 155 160

Leu Pro Asn Met Tyr Ile Gly Thr Ile Glu Tyr Asp Pro Arg Thr Tyr
165 170 175

Thr Cys Ile Phe Asn Tyr Leu Asn Asn Pro Val Phe Thr Val Thr Ile
180 185 190

Val Cys Ile His Phe Val Leu Pro Leu Leu Ile Val Gly Phe Cys Tyr
195 200 205

Val Arg Ile Trp Thr Lys Val Leu Ala Ala Arg Asp Pro Ala Gly Gln
210 215 220

Asn Pro Asp Asn Gln Leu Ala Glu Val Arg Asn Lys Leu Thr Met Phe
225 230 235 240

Val Ile Phe Leu Leu Phe Ala Val Cys Trp Cys Pro Ile Asn Val Leu
245 250 255

Thr Val Leu Val Ala Val Ser Pro Lys Glu Met Ala Gly Lys Ile Pro
260 265 270

Asn Trp Leu Tyr Leu Ala Ala Tyr Phe Ile Ala Tyr Phe Asn Ser Cys
275 280 285

Leu Asn Ala Val Ile Tyr Gly Leu Leu Asn Glu Asn Phe Arg Arg Glu
290 295 300

Tyr Trp Thr Ile Phe His Ala Met Arg His Pro Ile Ile Phe Phe Ser
305 310 315 320

Gly Leu Ile Ser Asp Ile Arg Glu Met Gln Glu Ala Arg Thr Leu Ala
325 330 335

Arg Ala Arg Ala His Ala Arg Asp Gln Ala Arg Glu Gln Asp Arg Ala
340 345 350

His Ala Cys Pro Ala Val Glu Glu Thr Pro Met Asn Val Arg Asn Val
355 360 365

Pro Leu Pro Gly Asp Ala Ala Gly His Pro Asp Arg Ala Ser Gly
370 375 380

His Pro Lys Pro His Ser Arg Ser Ser Ala Tyr Arg Lys Ser Ala
385 390 395 400

Ser Thr His His Lys Ser Val Phe Ser His Ser Lys Ala Ala Ser Gly
405 410 415

His Leu Lys Pro Val Ser Gly His Ser Lys Pro Ala Ser Gly His Pro
420 425 430

Lys Ser Ala Thr Val Tyr Pro Lys Pro Ala Ser Val His Phe Lys Ala
435 440 445

Asp Ser Val His Phe Lys Gly Asp Ser Val His Phe Lys Pro Asp Ser
450 455 460

Val His Phe Lys Pro Ala Ser Ser Asn Pro Lys Pro Ile Thr Gly His
465 470 475 480

His Val Ser Ala Gly Ser His Ser Lys Ser Ala Phe Asn Ala Ala Thr

Aren0054.ST25.txt

485	490	495
-----	-----	-----

Ser His Pro Lys Pro Ile Lys Pro Ala Thr Ser His Ala Glu Pro Thr
 500 505 510

Thr Ala Asp Tyr Pro Lys Pro Ala Thr Thr Ser His Pro Lys Pro Ala
 515 520 525

Ala Ala Asp Asn Pro Glu Leu Ser Ala Ser His Cys Pro Glu Ile Pro
 530 535 540

Ala Ile Ala His Pro Val Ser Asp Asp Ser Asp Leu Pro Glu Ser Ala
 545 550 555 560

Ser Ser Pro Ala Ala Gly Pro Thr Lys Pro Ala Ala Ser Gln Leu Glu
 565 570 575

Ser Asp Thr Ile Ala Asp Leu Pro Asp Pro Thr Val Val Thr Thr Ser
 580 585 590

Thr Asn Asp Tyr His Asp Val Val Val Val Asp Val Glu Asp Asp Pro
 595 600 605

Asp Glu Met Ala Val
 610

<210> 143
<211> 33
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 143
gctgagggttc gcaataaact aaccatgttt gtg 33

<210> 144
<211> 31
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 144
ctccttcgggt cctcctatcg ttgtcagaag t 31

<210> 145
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 145
ttagatatcg gggcccaccc tagcgggt 27

<210> 146
<211> 29
<212> DNA

Aren0054.ST25.txt

<213> Artificial ..

<220>

<223> Novel Sequence

<400> 146

ggtaaaaaaa cagccatttc atcaggatc

29